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THE EVOLUTION OF VALUES

STUDIES IN SOCIOLOGY WITH SPECIAL APPLICATIONS TO TEACHING

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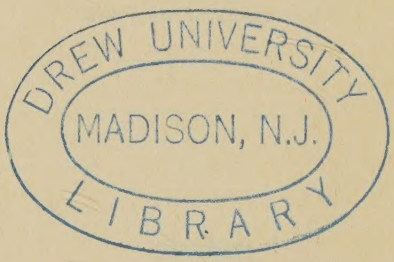

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CONTENTS

CHAPTER		PAGE
	INTRODUCTION	v
I	THE WORLD OF VALUES	3
II	VALUES AND REALITIES	18
III	VALUES AND EDUCATION	38
IV	THE DIFFERENTIATION OF VALUES . .	55
V	VALUES, ENDS, MEANS	71
VI	ECONOMIC VALUES AND IDEAL VALUES .	88
VII	RELIGIOUS VALUES AND MORAL VALUES .	115
VIII	VALUE AND SCIENCE	147
IX	VALUE AND SCIENCE *(continued)* . .	167
X	SOCIAL CONDITIONS OF SCIENTIFIC PROGRESS	182
XI	SCIENCE AND INDUSTRY	201
XII	SCIENCE AND MORALITY	211
XIII	ESTHETIC VALUES	226
XIV	THE NATION AND MORAL TEACHING .	250
	BIBLIOGRAPHICAL SUGGESTIONS . . .	267
	INDEX	273

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INTRODUCTION

That the subject of value is coming rapidly to its own in both sociology and philosophy is evident to any one who keeps in touch with recent literature, whether in the United States, England, France or Germany. Books and articles dealing with various aspects of personal and social values have been multiplying in every country, and there is a widespread feeling that this angle of approach is as central for the human sciences as measurement is for the classic physical sciences. The scale of values characteristic of a civilization is something very significant for it. Here we are at the heart of both social behavior and sentiment.

We Americans are rightly proud of the work that has been done in sociology in our country. Yet is there not danger of our losing contact with the movement of thought in other countries? Following Ward, it is quite customary to refer to Comte as in some sense the father of sociology. Have we, however, dwelt sufficiently upon the work of his successors to see what of suggestion they may have for us? And yet very able sociological studies have been carried through by such men as Fouillée,

Guyau, Levy-Bruhl, Durkheim, Worms, Espinas, Boutmy, Bardoux, Fauconnet, Mauss, Richard and Bouglé, to mention only French writers. I need not mention Tarde because he has received sufficient recognition.

It occurred to Mrs. Sellars and myself that it would be distinctly worth while to offer to the English-reading public a translation of a book expressive of this development of French sociology and intended for those who are not primarily specialists. In Professor Bouglé's *The Evolution of Values,* we believe that we have just such a book, a book that cannot fail to be of interest to sociologists, philosophers, educators and, in fact, to all who are interested in the growth and nature of human culture.

Bouglé's work in this book is analogous to the kind of thing done with such delicacy and profundity by Professor C. H. Cooley, whose *Social Process* also deals with values. It would be generally admitted that we have in Cooley's writings an excellent example of *philosophical sociology.* In the present work, likewise, we have an instance of philosophical sociology, but one springing out of somewhat different traditions and having a slightly different background. It does not detract from Bouglé's claim to originality to point out that he owes much to the work of the great French sociologist, Durkheim, who seems to have been a tremendous source of

stimulation to French thought. His constant references to the writings of Durkheim indicate his recognition of this fact. And it is of some interest in this connection to note that he is the successor of Durkheim in the chair at the Sorbonne. Here, then, we have an opportunity to compare the thoughts of French and American sociologists on a topic which is being more and more recognized as central to sociology.

I have spoken of both these schools as examples of philosophical sociology. And, by so describing them, I do not for a moment mean to suggest that they are not scientific in the best sense of that somewhat ambiguous and perhaps over-eulogistic word. I simply mean that they combine specific investigations characterized by the caution and systematic technique of science with a persistent brooding upon the basic question of the structure and general nature of society. In short, they are synoptic enough in their vision to grasp the interplay of fact and theory. Or, to put it in a metaphorical way, they try to see the woods and the trees together. The ideal of both is a dramatic *insight* into the life of society in all its complexity and configurated movement. And may I point out that this is what philosophy in its best sense is and has always been? It is one of the most hopeful signs of the times that, in Europe, philosophy and science are coöperating.

And the first stirring of such a desirable relation is making itself felt even in America, the home of departmentalism. For such a coöperation, beneficial to both, I have always stood. Perhaps it will aid in the rise of a fruitful union of intensive investigation with a sense for the comprehensive context.

The presentation of Bouglé's book to the English-speaking public has seemed to me an opportune time to summarize some of the recent work done in the field of values by sociologists and philosophers and to indicate what may be called the drift of thought. A brief discussion of this sort should furnish a good introduction to the subject-matter and at the same time help to give the reader perspective.

I

Why has there been the recent emphasis upon values and valuation? This question is one with which we may well begin.

It is often noted with surprise that the problem of value is being treated by present-day thought almost as though it were novel. Is it actually novel in any important sense? Yes and no. That it should be completely so is unbelievable, for those clearly differentiated values, the true, the good and the beautiful, have long been the subjects of philosophical investigation and analysis. Ethics, logic and

esthetics, which are devoted to their careful consideration, are among the oldest of the philosophical sciences. And yet there is a difference of emphasis, a new method of approach, that indicates something novel. To what is this due? What does it express?

I do not think that it is far-fetched to say that it is due to the growth of the human, or social, sciences. And this growth is itself due to a *social self-consciousness* which has come with democracy, humanitarianism, the advance of man's knowledge of himself and the world. Just as an individual who has become reflective becomes aware of his scale of values, so in a reflective society something similar is certain to occur. We are grasping as never before the nature, conditions and setting of values. We see how they function, how they are upheld, how they change. Another way of putting this explanation of the emphasis upon value is to say that it reflects our keener historical and psychological appreciation of human life. "Even before the war," writes Bouglé, "the expression (we must have a revision of values) was already gaining currency among thinkers. The philosophy of values was becoming fashionable." And what was true of France was likewise true of America. "Values" was becoming a word to conjure with.

It is a very plausible hypothesis—and one to which I lean—that the emphasis upon values is a

sign of the growth of *social naturalism*. While the traditional physical sciences—more properly called inorganic sciences—stressed measurement and causal laws of a quantitative and equivalence type and sought to know the world as a complex of external changes alien in nature to mind and its motivation, the human sciences were forced by their data to acknowledge motives, standards and choices. Thus, as sciences, they found themselves in a peculiar position between the upper and nether millstones of the inorganic sciences, on the one hand, and traditional transcendentalism on the other hand. Let me explain.

The prestige of the inorganic sciences made it difficult for the social sciences to have confidence in their own insights. And this situation held for that inclusive social science called sociology. How many articles and books have been written on the question of method in sociology. Can we speak of social forces? And are such forces measurable? Just how can the social sciences be linked up with the results and methods of the enormously successful physical sciences? There has been much brooding on such questions. First of all, biology was adopted, as by Spencer, to furnish suggestions. Then there was the movement in the direction of social psychology. The striking increase of data of all sorts in anthropology, comparative morality, comparative

religion, institutional history, etc., accompanied this search of sociology for categories and clues. The field was large and complicated. But there ran all through sociological thought this demand that society be considered something natural having its structure, processes and methods of change. It goes without saying that Darwinism furnished a constructive impulse. In some sense, society is a growth. Sociology had the task of finding itself, of being true to its subject-matter, and yet being a science.

But there was facing it the other, and older, tradition, that of transcendentalism, of orthodox idealism, of something akin to supernaturalism. Are not ideals imposed upon man from outside? Surely they cannot be mere effects of social and physical conditions? That would be to rob them of their authority. So here was another source of pressure. In reading sociological literature, one often finds antagonistic references to what is called variously *a priorism,* metaphysical assumptions, authoritarianism, supernaturalism, theological ideas. Sociology could no more escape iconoclasm than could astronomy and biology. To put values in place of an external duty is the sign of this iconoclasm.

What could be a more strategic point of attack than those very ideals and standards upon which authoritarian transcendentalism had laid so much

stress? To show that there are no fixed and unchanging ideals and social standards would be a home-thrust at supernaturalism in the human domain. To demonstrate that ideals and standards are just objectives and methods, valued in a given historical situation with the backing of human nature and achieved institutions, would be a declaration of freedom.

But another factor has, I think, entered to cause the emphasis upon values; and this has been the *generalizing possibilities of the term*. One cannot have science without generality, without something of the nature of identity. Note the part played by a term like energy in science. Now one of the primary features of human life, whether in the individual or in the group, is the attitude of appreciation or valuation which is taken toward objects and the kind of behavior which is correlated with it. This attitude and the behavior which constantly accompanied it would seem to be a common factor in all things and events which are taken up into human life. It is surprising, then, that it appears in all the human sciences and furnishes that element of identity which every science finds desirable? A synthetic science like sociology could not ignore the generalizing possibilities of value.

When we turn to philosophy we note a corresponding development. It is instructive to observe

that value has arisen as a characteristic term in ethics and æsthetics. Thus a recent stimulating work in ethics is called *Moral Values*.* And the division of philosophy, called axiology or theory of values, has recently developed to full recognition as coördinate with epistemology and ontology. Indeed, excellent work has been done in it toward the analysis of the predicate, good. Here we seem to have an interpretative concept not to be found in the physical sciences. Philosophy has been investigating its standing and import.

In such matters as these change is never as abrupt as it appears at first sight to the spectator who has not delved into the history of thought. Greek thought devoted much of its attention to the category of the good. And British hedonism and utilitarianism had its empirical and quasi-psychological theory of what constitutes the good. But these movements have been taken up into an historical and social context in our days and rendered more organic. It would seem that philosophy and sociology are ready to coöperate in the study of value as a natural kind of occurrence. We shall have more to say of this in a later section of our Introduction.

We have seen that it is the fashion to speak of educational values, moral values, artistic values,

* Everett, *Moral Values,* Henry Holt and Co.

political values, economic values, religious values. Man has become self-conscious and socially conscious; and he is aware of selection, interest, choice, preference as an intrinsic feature of human living and activity. It is this outstanding aspect which the term value symbolizes. There is differentiation of values, specialization, interaction. What makes them values? How do they affect one another? How do they grow up in human life? How are they evaluated and criticized? I conclude that the extension of the outlook of science to society was certain to bring in its wake an awareness of the central part played by valuations and an interest in the study of the conditions and processes involved in them.

Let us now study the larger background of this movement.

2

During the greater part of the nineteenth century, the conspicuous and clear-cut part of science was directed to knowledge of what was called external reality. I mean that human life occupied the background as something taking place in a sort of extra-scientific fashion. There were naturalistic privateers who dashed into the field—like Buckle, for example. But science had not yet developed success-

ful methods of attack, and the field was left to the more or less adequate speculations of philosophy working alone. Now while I do have faith in philosophy, I don't believe that it should work alone. It does not then have the material to work with.

Not for a moment do I wish to belittle all the insight which had gradually been accumulated in an unsystematic, empirical way about human life and society; but this insight did not yet constitute science. It needed linking up with biology and psychology. It needed—what shall I say?—*a sense of natural process,* a realization of slow growth and of characteristic principles. It was not until the end of the nineteenth century that the time was ripe for a comprehension of society as a natural affair. It has taken until our own day to get the clue to its locus and treatment.

Certain dualisms, or sharp contrasts, which have come down to our own day and still trouble our thinking express very well the outlook which had to be overcome. Thus existence was set over against valuation, and spirit was contrasted with matter. These oppositions were, in essentials, continuations of Cartesian dualism, which was at one with what may be called traditional Christian dualism. How, then, could human ideals and the conduct dominated by them be brought into the economy of nature? Reductive materialism still faced supernaturalism.

Or, to put it more mildly, nature was split in twain and human life threatened with isolation.

As the twentieth century dawned, the whole complex situation was ready for crystallization around some formative idea. To a really remarkable extent, a period of reconstruction and reorientation set in. Technical battles there have been a-many, but it would not interest the reader to enumerate them and space prevents their adequate consideration. Let us note some of the guiding ideas of this new *Weltanschauung,* for I do think that some appreciation of the profound alterations in the general thought of the time is essential if we are to understand the situation in regard to the status of values. We must, however, disregard the many cross-currents and concentrate upon the larger development.

Battles like these surge back and forth; and there are many allies whose alliance we may not at first comprehend. Roughly speaking, we find on one side such traditions as dualism, supernaturalism, monistic idealism and authoritarianism and, on the other side, naturalism, realism, evolutionism, historicism, pluralism and experimentalism. Accompanying this complex contest of traditions and movements was the slow disintegration of the strict mechanical ideal and the rising sense of *levels* in nature. As a result of this complex movement, the twentieth century has

witnessed a profound readjustment in outlook whose popular reverberation is just beginning, a readjustment which bids fair to lead to the frank inclusion of society in nature and a location of value in such a way as to make it the subject of genuine scientific investigation.

How is this possible? Ultimately by a frank recognition of the internal diversity of nature, a recognition made possible by what has come to be called *emergent evolution.* Instead of considering nature as a realm of a dead-level sort adequately interpretable in terms of mechanics, thinkers are now admitting the tremendous internal diversity and variety of things. The qualitative has come to its own in a new form. Evolution has joined hands with empiricism, and the result is that human life is now regarded as an undeniable kind of reality which has arisen in nature and which nature permits. Life, mind, social organization, artistic creation, the fluctuating movement of an individual's career, all these are flatly recognized as real and not illusions floating above the illimitable ocean of mechanical change. They may well have a limited locus and be but sparingly found in nature, yet they are what they are. The theory of emergent evolution confronts the older scientific tradition of reduction and simple identity. It stands for decentralization, novelty and diversity.

I have said that the movement of the nineteenth century was a confused one. It was one in which there was groping. It always reminds me of the line in Arnold's *Dover Beach* where he speaks of ignorant armies clashing by night. Dualism, transcendentalism, idealism, religion, supernaturalism were all in some measure allies as opposing a *reductive materialism* which wished to wipe away all differences as illusions.

What has happened in our own day? A clarification by the insight that emergent naturalism can satisfy what is valid on the side of the diverse allies fighting reductive materialism. And there has come an intellectual mastery by the advent of realism and the frank adoption of the idea of growth. A new conception of science has arisen which is democratic in its recognition of various sciences corresponding to the kind of thing studied. Chemistry is not simply a poorer physics; biology is not merely chemistry disguised; psychology is, in a measure, more than biology. In short, while the earlier demand was for homogeneity and, ultimately, the reduction of all special sciences to one basic science, there reigns to-day a frank pluralism with coöperation.

But while dualism, transcendentalism, cosmic idealism, supernaturalism could, in their common antagonism to reductive materialism, ignore their

differences, the appearance of emergent naturalism has broken their fighting unity. And we may add that developments in thought itself had long been working against them. Once we are allowed to think of life and mind as natural developments, dualism, transcendentalism and supernaturalism are like trees whose bark has been girdled. They will wither at the top. Such, I think, is the actual situation.

While, as a matter of theory, the belief in the fundamental homogeneity of the sciences was quite generally accepted in the nineteenth century, it is nevertheless true that the various special sciences made their advances as best they could. The result was a diverse growth of sciences. And among these were to be found sociology and those philosophical disciplines akin to it, viz.—ethics and esthetics. In these the human spirit studied itself in its various manifestations. To call them sciences was in itself a blow to the dualistic tradition. It remained to fit them into the scheme of nature. How could values be natural? How could science deal with something seemingly so elusive? How could the world of description take up into itself the world of appreciation? To answer these questions was to give history and the humanistic sciences a position in the hierarchy of the sciences. It was to make the social sciences also natural sciences.

It would seem that we are confronted with what may be called a correspondence principle. *The sciences must correspond to the nature of their fields or objects.* And if these fields are diverse, the sciences must also be diverse in many ways. A certain logical discontinuity or diversity of the sciences must exist to reflect the actual diversity of things, a diversity which has come about genetically *i.e.*, by cumulative growth.

Sociology has much to learn from the frank debate which is occurring among psychologists. Is psychology a natural science? And, if so, what is the status of the information gained by introspection? As is well known, behaviorism arose as an expression of the natural-science standpoint. To know an object we must know it in terms of external perception as the other sciences do. But do we not have a double knowledge of the behavior of human beings? And do we not find a constant correspondence between internal behavior, as revealed in consciousness, and external behavior? This is not the place to enter in detail into this fascinating question. But may I point out that my own thinking has led me to take essentially the position adopted by the Gestalt school in Germany? We must regard consciousness as essentially one with internal

behavior or response.* Let us, then, admit that a human being is a highly gifted organism and that, at this level of emergent evolution, the reality demands a kind of science correspondent to it.

Valuation is, then, a psychological fact. Organisms desire objects, tend toward them, are filled with emotion at the sight of them, select them, give them value-meaning. Here we have a behavioristic fact displayed in attitude and conduct, and a conscious experience with its multitude of variations and shadings. From this standpoint does it seem difficult to bring value into the economy of nature? No more than differential behavior and selective attitudes. And we have left Cartesian dualism behind us.

This readjustment which is taking place in psychology has, we have suggested, immense significance for sociology. In the light of it, sociology can gain its rights as a natural science and still include all that insight into group motivation which consciousness helps to give. The barrier between natural-science methods and experiential insight has broken down. They are now seen to supplement each other.

Approached in this way, what a wealth of ma-

* Those interested in this question will find a satisfactory discussion in Koffka, *The Growth of the Mind.* My own analysis is in *Evolutionary Naturalism,* Open Court Co.

terial the human sciences offer to sociology! To gain insight into what takes place in social groups is the task. To realize the context or ecology of the group, to sense its growth, the accumulation of tradition, the interaction of individual and group, etc. *And here we are participants in reality and not mere onlookers as in chemistry or physics.* Our chief danger is to idealize and sentimentalize social process. A sociologist must have balance, a genius for social process. The remark of Cooley that Goethe would have made an ideal sociologist recurs to me in this connection.

Let me, in conclusion, bring together the essential points in this discussion of the larger background.

We have argued that a new outlook has been gradually displacing the old anarchy which consisted of a struggle between reductive, mechanical materialism, dualism and transcendentalism. This new outlook holds in it great promise of insight into the various levels of nature. There is, as yet, no accepted name for it, but it is probable that it will be called emergent, or evolutionary, naturalism. The main point is the recognition of levels, or gradients, in nature with sciences to correspond to them. And the aim of each science is insight into its field. What follows for values? Surely that we cannot have *insight* into either individual or social life without regard to values.

3

A few remarks upon the history of value-theory would seem to be in order, though I must be brief. Even a quick survey would show, I believe, that there has been a movement in it entirely in accord with the general course of thought as I have outlined it. Thus Spinoza attacks cosmic teleology in the interests of the physical science of his day. Then there is the reaction against reductive materialism in terms of Kantian dualism with its separation between the theoretical and the practical reason, nature with its necessity and morality with its freedom, a reaction continued and developed by idealism. Such names as those of Lotze, Ritschl, Hegel, Windelband, Münsterberg, Bosanquet, and Sorley occur to one in this connection. Then follows the more empirical and naturalistic current of thought which we associate with realism and pragmatism.

The fortunes of value-theory have been intertwined with the general movement of philosophic thought. For the greater part of the last century physical realism was in disrepute. Reality was held to be in some sense dependent upon mind, and mind was thought of as dominated by values. Somehow, at the heart of the world, are eternal ideals of justice and goodness. In such a belief Platonism and

theism met. There are technical points here into which we need not enter. Suffice it to point out that the main thesis was that reality is to be interpreted in terms of the highest qualities which we can discern. At the heart of things there must be something akin to personality, and there must be a governance of the universe analogous to political sovereignty in our human society.

But we have already pointed out that this struggle between reductive materialism and transcendentalism was left behind by the discovery of the principle of differential evolution. We must add that a frank physical realism again appeared in philosophy. These two new forces have, I believe, quickly rendered the old controversies antiquated. Only those who hold the physical world to be largely an illusion can maintain that human values control the destiny of things in a wholesale fashion.

Consequent upon this advent of a more realistic and pluralistic perspective, value-theory entered upon a new phase in which it has devoted itself to detailed analysis of human value-experiences and value-judgments. And there has accompanied this analysis a growing insight into the psychological and social conditions and factors concerned with value. The resources of psychology, logic and sociology have been brought to bear upon the subject. We

have, I think, the right to say that value-theory has entered at last upon its constructive phase. In the remaining part of this section I shall try to summarize some of the chief results of these investigations.

On the psychological side the strategic importance of personal attitude in the way of desire, feeling and interest has been brought out. It is the *connection* which an object makes with the tendencies and desires of a subject that determines its felt value. Such a connection is mediated by cognition. It is the object as we interpret it that enters our lives and gets suffused with feeling, desires and approvals. Do we not have, here, a unitary process in which cognition, desire and sentiment all mingle and play their parts in giving an object a meaning? And by a unitary process I mean the integrative response of the personality. An object is taken up into our lives in an appreciated situation. We then feel it as good, useful, beautiful, dear, sacred, etc.

There has been much controversy in regard to the element in consciousness to be correlated with the sense of value. Some have maintained that feeling is the constant factor, while others have as stoutly asserted that desire is always present. May I suggest that desire is more a term for a positive attitude, a dynamic set of the personality accompanied by feeling tone, ideas and kinæsthetic sensa-

tions? If so, it is a matter of degree; and those conditions of the self in which it is scarcely present or is quiescent may yet be accompanied by a sense of value. I do think, however, that whenever there is a clear appreciation of value some measure of self-expression is involved.

It is usual, again, to distinguish between intrinsic and extrinsic, or instrumental, value. In the two cases both attitude and situation are different. In intrinsic value, the object engrosses us for its own sake, that is, the personality lingers upon the object, though this may be for various reasons. In instrumental value, the object is appreciated, but there is a sense of its relationship to other objects and situations. Thus money has value in our eyes but chiefly because it is an instrument for the securing of many goods which we value pretty directly.

If we examine an adult with respect to his value-experiences, we soon note the part played by his training and his awareness of the attitudes of other people. Social suggestion plays a large part. It would be misleading to treat values as a sensory matter alone although we should not ignore sensory pains and pleasures. Values seem to be correlated with sentiments and developed attitudes, and these rest upon a social background which has modified the individual. We are thus led to stress social psychology and to think of the individual as a social

personality. It is within social situations with their opportunities, suggestions and traditions that the individual achieves personality and a complicated scale of values. But it cannot be denied that individuals respond differentially and that there is room for all sorts of variations.

It is at this point that sociology enters. For sociology, values are in a very real sense objective and persistent. The investigator finds that values remain fairly constant during one period and are challenged and largely transvalued the next. So far as the individual is concerned they possess objectivity for they mold his outlook. This means that society at large, or even a small, but closely knit, social group, is possessed by certain attitudes and sentiments toward objects. These attitudes are betrayed by behavior. Thus each individual is aware of a common attitude characteristic of the members of the group, an attitude which has, for its internal side, a value-experience and a value-meaning. If we identify values with the behavioristic attitudes which accompany them, we may assert that values *function* in society. Because of the individual's social nature and because he must make his adjustments to groups, social values are powers in his own life. He must reckon with them, take up his own attitude towards them.

With the evolution of both society and the indi-

vidual, types of values of very complicated kinds appear. This means that life has become complex and differentiated. There are many activities, groups and institutions. Thus we can speak of economic, political, religious, artistic, social, scientific and recreational values. We know that religious situations and objects are different from artistic situations and objects. As Americans we may value Congress as an institution. As scientists we may value the technique to which we owe so many thrilling discoveries. Man has many interests, and these find expression in values.

Who can doubt that the subject of values introduces us into the very heart of both individual and group life? Here man is living and expressing himself. Clearly values are intrinsic to reality at this high level. In values we are *in* culture, *in* civilization, *in* the very pulse of selective and creative human life.

We have said enough to show the significance of value from both the psychological and the sociological standpoint. It is evident that there are problems a-plenty in working out the psychology of value-experiences and the part played by values in social groups. And this way of approach shows us that values are very human affairs rather than eternal and transcendent. They are expressions and functions in human living. But there is another set

of problems which we must mention, namely, those concerned with the logical status of value-judgments. Are judgments of value true and false like the cognitional judgments of science? Or have we here a peculiar kind of judgment?

In a famous paper entitled *Jugements de Valeur et Jugements de Réalité,* Durkheim employs the distinction between judgments of fact or existence and judgments which attach a value to objects in relation to conscious subjects, a distinction which goes back in one form or another to Lotze and Ritschl, if not to Kant. It will be of interest to examine his analysis of this contrast, especially so since Bouglé in large measure follows Durkheim.

First of all, Durkheim seeks to isolate true judgments of value from judgments which merely express personal preferences, such as "I like hunting," or "I prefer beer to wine." Such statements of preference are, he maintains, judgments of fact for they express my acknowledged reaction to objects. I recognize my attitude toward objects, and attitudes are objective facts. It is interesting to note that thinkers who are behavioristically inclined, like Professor Perry of Harvard, are led by a similar observation to deny the reality of any distinctive judgments of value. The attitude of desire or interest is the basic feature. But Durkheim insists that propositions like the following are true judg-

ments of value: "This man has a high moral character"; "This picture has marked æsthetic value"; "This jewel is worth so much." In these cases we attribute to objects an objective character which is supposedly independent of the way in which we feel at the moment. Such values exist in a fashion outside of myself as an individual. We argue about them and attempt to convince others.

He insists that many thinkers have not realized the reality and significance of this difference. For them, the judgment of value only expresses the way in which an object *causally* affects a subject, the kind of feeling it produces. For such a view, the value of a thing is simply the determination of the effects which it produces by reason of its intrinsic properties. But, he asks, who is the subject in relation to which value in objects is and ought to be estimated? Durkheim believes, on the contrary, that we all recognize a socially objective scale of values which is seldom identical with the scale of the individual. *Besides, there is a constraint in values which can be explained neither by the object nor by the individual.*

To those who are acquainted with contemporary French sociology it will immediately occur that Durkheim has in mind the creative power of society as something which is objective to the individual. In order to bring this out, he criticizes the view that

society is something merely affected by the *utility* of objects in a collective way. No; the situation is different. We must put ourselves on the inside of society and shift our emphasis from thing to the way in which society takes up the thing into its own life and interests. "All these previous theories," he writes, "presuppose that the value is literally in the things and expresses their nature. This postulate is contrary to the facts. There are a number of cases where there exists no relation between the properties of the object and the value which is attributed to it." The examples he uses are idols, flags and postage stamps. It is what these objects are selected to symbolize that gives them value.

Having discarded causal theories of value which ignore the tremendous importance of the *social medium* into which things are taken, Durkheim proceeds to contrast his social naturalism with the theological and idealistic traditions. The basic question is the source of ideals used in judgments of value. Whence are these norms which function in society?

His objections to monistic idealism of what I have called the transcendentalist variety are of the kind which modern historical and genetic investigations have driven home. How account for the immense variety and variability of ideals and norms? And in any case why should one put ideals

outside of nature? They manifest themselves in nature and there is no good reason to deny that they have natural conditions. Ideals are effective in reality only so far as they move our wills. It is for social science to find whence they come, how they are bound up with experience, and in what consists their objectivity.

Let us conclude this brief résumé of Durkheim's position by an indication of his theory of society. It is his belief that, when individuals act in relation and upon one another, there arises from their synthesis a psychical life of a new kind. This new psychical life is more intense than the life led by a solitary individual. And it is also qualitatively different; it is more disinterested and communal in its texture. Now at certain intense moments society creates ideals which influence and control the lives of individuals. The individual feels himself to be in a social medium which constrains him. "These ideals are not abstract, cold, intellectual representations, robbed of all efficacy. They are essentially motor; for behind them there are real and active forces. These are collective forces, which are consequently natural forces, although moral; and they are comparable to those which play their part in the rest of the universe."

It has been my purpose to suggest the broad, general agreement between French and American

sociology. Let me therefore bring out this sociological theory of values by referring to Cooley's approach to the subject.

Social process is for Cooley akin to organic growth. This means that society is in every sense a natural affair whose characteristics must be grasped by sympathetic insight. And valuation is an essential and very important phase of social process.

Having pointed out that the idea of valuation has been extended from the practical sphere to almost any kind of human activity, he goes on to declare that valuation is everywhere a matter of ascertaining how much alternatives appeal to you. It should be noticed how quickly the idea of purely external causality is left behind. In the specific valuations of an individual he is thought of as the centre and decisive locus of preferences which express his personality in the situation which confronts him. A system of valuations is a complex of practical ideas, that is, ideas having a dynamic emotional backing and so closely connected with behavior. Among these ideas there is selection, competition and organization, a process of creative adjustment, so to speak, which is inseparable from life itself. By a process analogous to that which takes place in the individual as he lives, men, nations, doctrines, political methods, types of culture, all come to

possess for the time being various degrees and kinds of value.

Into details, interesting as these would be, we cannot of course here enter. We realize that both Durkheim and Cooley are naturalistic in their treatment of values. At the high level of society with its new qualities and abilities values are expressions and functions revelatory of the processes that here occur. Every civilization is a culture of values. Who, for instance, can understand democracy without a keen sense of the valuations it champions? And these valuations must compete with other valuations and maintain themselves in the movement of events. Perhaps nothing will so soon free the thinker from an abstract ideology as a feeling for the values in a given society. Truly social thinking is in large measure the reflective objectification of values and their consequent criticism or evaluation.

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It is my hope that this necessarily brief indication of the larger drift of thought will gain fuller meaning as the reader proceeds to follow the admirable survey of the various kinds of values and their evolution which Professor Bouglé gives us. A few remarks on the character of the book may be of assistance.

In his preface to the French edition, M. Bouglé points out that he is making a survey, or review, and not an exhaustive study. When this is the case, he says, one suggests rather than demonstrates; one poses more problems than one solves. In other words, the book is not so much a systematic treatise as a brilliant improvisation based on a thorough knowledge of the field. It is meant for reflective men and women interested in education and sociology rather than for specialists. And yet, as the late Dean Albion Small remarked in his review of the book in the *American Journal of Sociology,* "The most neglected area in the field of general sociology is the theory of group values. This book might well be used as a base from which to develop the most general study of group values."

May I conclude this already too long introduction by indicating some of the chief points emphasized by our author?

The basic principle is that values are objective because imperative and imperative because collective. It is society that creates values. They express social aspirations or ideals. Society is not alone an exchange of services or a collaboration of forces; it is, above all, a communion of feelings. And it is especially by the transmission of values that societies perpetuate themselves.

The bearing of this view upon education is obvi-

ous. Education cannot be a mere learning of facts. There must be selection, and an indication of the right attitude to take towards various things and situations. The teacher must be a personality.

The history of society is a history of the differentiation of values. We may call this the spiritual side of division of labor. But values can mingle and interact upon one another in the unity of society. Human personality reaches its highest point where values are developed and overlap. The attachment of an individual to diverse values which must be coördinated gives breadth and intensity to human life. It is this functional conjunction of values which M. Bouglé calls *polytelism*. The same values may serve as means to many different ends. The lines of relation cross and recross. Values compete and coöperate. The whole situation is really very organic and interpenetrative.

It is interesting to note that Bouglé follows Durkheim in asserting that opinion plays a rôle in economic values. Here we have a parallel to Cooley's analysis of the social context of the market as an institution for pecuniary valuation.

And so in this large survey of the many kinds of values we are led to see how social conditions affect even the most specialized values and to have a sense for what is favorable and what is unfavorable. Religious values, æsthetic values, industrial values,

scientific values, moral values are studied historically and suggestions made as to their effect upon one another.

It may be that some will feel that French conditions are held too much in mind in the discussion of education. But do not Americans need to become aware of educational problems in different settings? Contrast has its merits as a psychological principle. Moreover, is not the laic school becoming an American problem? I believe that the French have met some of the problems of the relation between school, church and state more fearlessly than we have yet done here in America. If our schools are to be culturally vital and modernistic we have our struggles still ahead of us. I fear that we have escaped a sharper conflict in these matters by drifting and putting information above that education in values which marks the enlightened citizen. Surely here is a field where philosophy, sociology and education meet.

ROY WOOD SELLARS.

THE EVOLUTION OF VALUES

CHAPTER I

THE WORLD OF VALUES

The need of regeneration, of purification, of reconstruction, felt by many combatants of the great war, has, more than once, been expressed by those among them who recalled their philosophic culture by saying: "We must have a revision of values."

Even before the war, the expression was already gaining currency among thinkers. The *philosophy of values* was becoming fashionable.

For many, indeed, value is still a term for the financier and the economist. Values, the securities which repose in pocket-books and safety vaults, have to do with the power of riches. They represent coal and wheat, cars and ships and, above all, what Pierre Hamp calls the grievous toil of mankind. He who holds these bits of paper holds also the possibility of buying, of selling, of speculating. He can procure for himself the most varied satisfactions. And value as a general expression conveys the very indefiniteness of these perspectives.

The financier manipulates values. The economist studies values. One of his favorite problems is that of explaining how a price is established on the

market. To solve this problem, he must be able to define the forms and the essence of the value of things. Accordingly, he distinguishes between use-value and exchange-value. He estimates what, in the constitution of value, is due to the raw material, to human labor, to the relation between supply and demand.

But, instructive as all these studies may be, they do not exhaust the subject. Value can be understood in senses entirely different. "Value does not depend upon the number of one's years." This single line carries us, as with a sweep of wings, toward a new conception. And long before Corneille, as far back as the *Chanson de Roland,* we find, "Such value a knight must have." Value is, as it were, identified with the ideal of chivalry. It implies not only power of action but purity of intention, generosity of heart, capacity for sacrifice. We are, here, at the antipodes of the economic world. Here, he who possesses value possesses the power, not of buying and selling, but of giving that which is neither bought nor sold, of giving himself. Valor * (that is, value) reaches its highest mani-

* *Translator's Note:*—The attention of the reader should be called to the fact that the word *valeur* means in French both value and valor. In Old English we find the same dual meaning as in the line, "Therfor the duke him dight as man of grete value." In Italian we find the same situation. The Latin root, *valere,* means to be strong, to be worth. The study of a term like virtue reveals a similar concrete origin.

festation when he who displays it gives himself to it wholly, like the soldier willing to die for his flag. This, doubtless, is why the military form of courage, which implies the supreme risk, seems at times to constitute moral value *par excellence*.

But other virtues have equal pretensions to the title of values. Long ago, Rollin remarked, "Our magistrates have shown, on more than one occasion, the truth of what Cicero says in his *Offices,* that there is a private and domestic value which is not inferior to military value."

Later Saint-Simon formulates a demand of the same nature. For the nations of his choice, for those which increase man's power over nature and prepare the rational exploitation of the globe, he claims, against Rousseau, a moral value not to be disdained. The "industrial" nations show themselves as anxious and as capable as the others of defending their independence: they build up civilizations whose pillars are so many virtues.

In our day, the expression is revived to be more sharply opposed to values of the economic type. We like to proclaim superior a value which is not material, which goes beyond the level of physical needs and is outside the round of mechanical tasks. In one of his delightful books of concrete and living pedagogy, Angelo Patri gives an exposition of the

means he employs to awaken the sense of values in a quarter of New York where all sorts of races have gathered to be kneaded together by the great industries. He encourages the children to ask their parents to teach them the legends, the poetry, the popular songs, dear and familiar to them in their native land. He believes that, through such means, parents and children are drawn together, making each other the mutual gift of human values. He would have us realize that these immigrants or children of immigrants, in going back to the fount of their national poetry, refresh their souls. They raise themselves above a dull reality: they find again the path of dreams and of hope. And is not that, even for more cultivated minds, one of the functions of art? Intimacy with the great writers enables one to multiply, as Taine said, "those quarter hours in which one is not entirely a brute."

And what we say of art, we might repeat of a still more impressive, more comprehensive, power. In the matter of getting free from this sordid world, of laying aside burdens, of "dematerializing," religious beliefs offer, traditionally, an incomparable aid. That, without doubt, is why the Danish philosopher, Höffding, in his book on religion, makes the statement that, in religion, we see, first and foremost, the "guardian of values."

These examples are sufficient. These various

attempts to specify the meaning of values lead us, of themselves, to a generalization. Value finds its place in the sphere of political economy, of morality, of art, of religion. It is confined to no one of these spheres. It is, in truth, a universal category, capable of the most varied applications. We can pass judgments of value on a chair as well as on an act, on a rite as well as on a poem.

That is why we say that there exists a world of values. Esthetic or moral, religious or economic, each and every one of them solicits our attention, seeks our sympathy, draws out our efforts. Between their various claims there may be harmony. There may also be competition.

From this comes the necessity of introducing, in this world also, a principle of classification, of order, of hierarchy. This is, precisely, one of the functions, and not the least, of philosophical reflection. It must not only explain reality to us; it must order our preferences. It must set up a table of values.

It goes without saying that it is not only the professional philosophers who are concerned with this table of values. Whoever offers to humanity a system of thought aims also at influencing the order of our preferences. Nietzsche seeks to revise the system of values by preaching the Gospel of aristocratic hardness. But, before Nietzsche, Rousseau

attempted a revolution of the same order by preaching the Gospel of plebeian fraternity. There is one table of values for Rabelais, who loves nature, and another for Pascal, whom nature alarms and disgusts. A Proudhon, ever intent on liberty, does not order moral values in the same way as an Auguste Comte, always preoccupied with the restoration of authority.

What we say of the writers must, moreover, be repeated of all great artists. Before the war, a German, to awaken in his country—so gifted in mechanical discipline—the sense and the taste for independent culture, conceived the idea of proposing "Rembrandt as educator." And we all know what lessons of inner heroism, of personal resignation and collective enthusiasm, generations of souls have drawn from the symphonies of Beethoven. Every masterpiece, whatever it may be, works for or against a certain hierarchy of feelings. When our teachers of the humanities endeavor, by their united efforts, to reconstitute the history of the human mind, it is also their mission to pass in review, before the young minds seeking orientation, the series of tables of values which have been erected on the heights.

Perhaps we see more clearly, after this study, what those who came back from the war wished to say when they repeated, "We must have a revision

of values." They meant that certain things and certain people, such and such modes of being, of acting, of thinking, ought, after the experience of the war, to be more highly estimated—or less—than they were before.

One could have wished, indeed, that, in regard to the order of changes to be made, their feeling had been unanimous. One could have wished that, from the depths of the trenches, as though from the heart of the torn country, there had mounted a single chorus which would have dictated our duty to us. In reality, discordances broke forth immediately. Certain combatants have returned from the experience of the war with faith in democracy more firm than ever in their souls, believing it, alone, capable of delivering the world and assuring peace. Others, on the contrary, proclaim the necessity of restoring the principle of authority to strengthen national unity. "The great crisis has revealed yet once more," says one group, "not only the legitimacy but the necessity of religion." Others maintain that, "Laic teaching has stood the test on the field of battle. It has shown itself as capable as any other of engendering a spirit of sacrifice." And, at the very moment when many demand that, in any new organization, regard for quantity of production should take the lead, others point out that it is especially through intellectual culture, and particu-

larly that dominated by the classical tradition, that France can and must excel.

Doubtless these discords are inevitable. And perhaps, after all, they may be fruitful. In any case they reveal one unanimous conviction. If we wish to make fundamental changes in institutions, we may well concern ourselves, first of all, with the hierarchy of feelings. The world of values is, as it were, the invisible workshop wherein are prepared the changes of scene for the visible world.

For those who wish to act on the world of values, it would, perhaps, be worth while to recall how it is constituted and how it evolves, how the elements which compose it are dissociated and how they combine. In these matters, sociology may have some useful suggestions to submit to educators.

It would be advisable to determine, first of all, the essential nature of judgments of value.

In all conversation in general, and particularly in the conversations we hold with children, *judgments of value* and *judgments of reality* are closely intermingled. It would be a good thing for educators to reflect upon the distinction between these two sorts of judgments. It is a distinction with which the logicians of to-day are familiar and it is rich in consequences.

"This table is rectangular."—"The carpenter

makes three tables a day."—"Iron expands when heated." Here we have judgments of reality. They assign certain properties to persons or things, taking no account of our desires, our dislikes or our sympathies. They aim at *objectivity*.

But if I say, "This table is convenient, or beautiful," "This workman is conscientious," "Gold is more precious than iron," I am not satisfied with affirming the existence of certain objective properties. Here, feeling enters into the reckoning and I cannot disregard it; for the judgments in question are appreciative. They would lose all meaning if they did not take into account the desire or aversion, the sympathy or repugnance which such a thing, such a being, such an act arouses in men. They do not express purely and simply the properties of an object, but set over against these properties the attitude of a subject. They are *subjective*.

"We must represent value to ourselves," says Charles Gide, in his *Cours d'économie politique,* "as an illumination of things under the ray projected by our desire." What the economist says, the moralist might repeat, as might also the historian of art and of religions. They are all concerned with values, naturally differing in kind but all having the common trait of translating states of mind, not external realities like those studied by the physicist, the chemist or the biologist.

Some will point out to us—the idealist philosophers have insisted to satiety on this point—that external realities, themselves, have no existence but for minds. "What is the light of the sun," they will say, "without eyes to receive it? What is the law of gravitation without a thought to comprehend it?"

Let it be. Let us not reopen, here, this old debate. Let us grant to the idealists that every judgment, even of reality, is subjective in the sense that it translates, first of all, the nature of the mind. In return, they will accord to us that judgments of value are doubly subjective, since they translate not only the nature of the mind but the characteristics of the affective life. Should one set aside these latter, one would extinguish, at a stroke, all the values of the world.

There are certain maladies which bring to this statement a sort of experimental confirmation. Pierre Janet and Georges Dumas study those unfortunate creatures who no longer find any savour, any meaning, any interest in life. Everything, from the comfort of a chair to the beauty of a work of art, the nobility of a deed, the accomplishment of an undertaking, leaves them cold. To their eyes the world is, as it were, robbed of color. All its values are engulfed in the night of indifference.

Have not those who for long lived the life of the

trenches felt themselves at times slipping into this singular apathy? "For four years," says Gabriel Séailles, in his excellent pamphlet entitled *Travaillons,* "they have waited during the long, gray hours, for their food, for their ration of poor wine, for death." War is not only a great consumer of economic values: it destroys many moral values. There are some which it makes shine out to the highest degree. The spirit of sacrifice, the feeling of solidarity, these are veritable star-rockets of the battlefield. There are others which it extinguishes. From habits of cleanliness or economy up to respect for property, how many delicacies and scruples became strangers to those desperate men who felt themselves sinking, little by little, in a blood-soaked mire!

So true it is that the eminence of values varies according to the state of the human soul, the tension of its energies, the orientation of its desires, the perspectives which are open or closed to it.

"But then," some will say, "are not values entirely relative? If they translate, above all, a state of human sensibility, is there not, between the judgments which express them and the judgments which science formulates, an infinite distance?" There is, indeed, for certain philosophies, a veritable abyss; and they increase it at their pleasure.

They repeat that values are "of another order" than the realities grasped by science. Reason cannot bridge the chasm between these two worlds. Wings are needed, those enthusiasms of the heart and those intuitions which take the place of demonstrations.

Do we not run the risk, here, of falling back upon the purely arbitrary? Who knows, as Pascal, himself, points out, that it is not mere caprice that hides itself behind feeling? These conclusions are, perhaps, dangerous for our teaching. We hold this teaching aloof from life, we lessen its capacity for action, if we eliminate judgments of value from it. And if we retain them, we bring back into the heart of the school, those "tastes" and "colors" about which there is no disputing.

We must think twice, then, before accepting the proposed antithesis. Is the distance between values and realities really as great as it appears at the first glance? Are not values, in a sense, themselves realities? Perhaps we may be able to regain the ground too hastily ceded.

A preliminary observation forces itself upon our attention. Every one is able to distinguish, more or less clearly, between his personal impressions and the judgments of value to which he refers.

When I say, "Gold is more precious than iron," "This workman is conscientious," "This table is beautiful, or convenient," I do not mean to express only the impression which things or persons make upon me, an impression which would vary according to my needs or my humor. I rest my judgment upon a certain number of habits, a certain ensemble of rules, certain ideal forms which are not my personal achievement. I discover them in the society in which I live. They are facts. Values present themselves to me as given realities, as things.

It would, indeed, be a paradox to call them things, if we regarded a thing as that which we see, which we touch, which is external to us. But this falls short of the mark. F. Simiand very pertinently remarks that it would be better to define a thing as "that which offers resistance to our personal initiative," that which imposes limits and an orientation upon it.

Now, is not this the case with most of the values with which we are familiar? Every one realizes, to-day, how difficult it is to act, even in concert with others, on the course of economic values: the "market" is a terribly resistant reality. But a moral ideal, also, is a sort of reality which, to make itself respected, employs many different means, from the strong arm of the police to the frown of the father

of the family. Even in the esthetic field, admirations are forced upon us, and the very struggle which innovators must carry on, to get a new formula accepted, is proof that, in these matters, also, there are powers of resistance, systems of pressure, subtle forms of constraint.

And this, precisely, is why the task undertaken by the iconoclasts, by those who solemnly announce to the world that they come, as Nietzsche says, to break the table of values and reverse the scale of preferences, is not an easy one. These are realities which resist manipulation.

Surely this means nothing less than that judgments of value, far from translating only my personal preferences, translate kinds of reality which dominate in the society in which I live. But if they impose themselves in this fashion, is it not because they are, in a sense, the work of this same society whose life they safeguard?

Here again, we recognize the fundamental thought of the sociological work of Émile Durkheim. His last writings are full of this idea that society is essentially creator of ideals. By its properties, by the peculiar forces which emerge from the assembling of men, are to be explained the characteristics of those great magnets which we call values. Neither the properties of things nor the capacities of individuals would suffice to account for them. In

short, for Durkheim, values are *objective* because *imperative,* and imperative because *collective.* We must try to make these ideas clear by calling to mind under what influences the projection of values operates.

CHAPTER II

VALUES AND REALITIES

How do values become realities? How does that which lives within us project itself beyond us? We must linger a moment over this problem. The desired solution will, perhaps, enable us to throw light upon the relations between psychology and sociology, and to measure what the latter can add to the former.

Values exist only in relation to desires. We do not mean by this that they are nothing more than so many shadows dancing on the wall, forms variable as our desires, themselves. The expression, *judgments of value* shows that clearly. Far from leaving tastes and colors matters of individual opinion, we believe that we are able, even in this question of value, to formulate constant relations. Judgments of value are *attributive* and *appreciative* at the same time. This means that we assign to an object—whether ideal or material matters little for the moment—a worth independent of our momentary impressions, capable of opposing resistance to our impulses, of dominating our individual preferences and, thus, of assuming for us a sort of reality.

It will be easy to comprehend the possibility of this projection if we recollect that man has intelligence as well as sensibility, and so is not limited to the present moment. He is capable, on the one hand, of recollection; and, on the other, of foresight; capable, in short, of abstraction and generalization. From this arises his capacity for detaching his impressions from himself to attach them to objects.

Perhaps what takes place in the world of sensible realities will help us to understand what takes place in the world of values. I perceive, in my study, a table, books, a fire, a picture on the wall. These are so many sensations which vanish if I pass into the adjoining room, but I can reawaken them by reëntering the door. That is why I localize them in ensembles of properties from which I compose objects. Stuart Mill defined an object as a permanent possibility of sensations. But what is true of sensations is true of satisfactions. To table and books, to picture and fire, I attribute not only an existence, but also a value, when I remember and when I anticipate the various pleasures I owe to them. It goes without saying that this sort of judgment is applicable to the immaterial as well as the material, to ideas as well as things, to a method of work, to a rule of conduct, to a rite, to a principle. Wherever found, a value is a *permanent possibility of satisfactions.*

Projection, of itself, presupposes a certain number of higher faculties. Can a world of values exist for animals? It has long been pointed out that the exterior world could not have for them—through the lack of a reason capable of ordering the chaos of sensible impressions—the same logical consistency as for us. There is even greater reason to believe it difficult for them to project values beyond themselves. There are some animals which store up food: it is reasonable to suppose that they appreciate the provisions they set aside. There are some which treasure objects which serve them as toys. But there are none which transform things into tools. Tool-making is, according to Franklin, the prerogative of man. The animal has not been able to rise to the level of conceiving the value of an intermediary such as the hammer or the knife.

But, above all, lacking language, he has not been able to incorporate, in words, memories and promises of satisfactions. He can obey orders: he does not formulate principles. He remains incapable of being roused by abstractions. And it is in this, perhaps, that the most distinctive trait of the human being consists.

In emotions which are not bound up with impressions lies the richness of our inner life. The imagination can revive pleasure or pain. But there is no need of evoking a concrete object or a particular

being in order to revive them. It matters little if the beings or objects remain in obscurity, if, on the scarcely lighted stage, the forms follow and pursue each other like phantoms. The possibility suffices to move us. And the very indeterminateness of the various possible contents serves but to heighten the worth of the setting. Those "doubly representative" feelings, as Spencer calls them, are multiplied for man in proportion as he becomes more capable of abstraction.

And so it comes about that he struggles for all sorts of values which are only possibilities; for the conquest of Gold or Power, for the defense of a Flag or for the defense of Liberty.

It is, indeed, exactly from this angle, regarding them as possibilities, that man appreciates values when he turns his attention toward the future and prepares for action. But we must be careful not to fall into the error of believing that the work of the intelligence, acting on the emotions, is limited to opening up these perspectives. It is attracted by the past as well, and never ceases to seek, therein, reasons for appreciating things or ideas. For example, the consideration of what an object has cost or, put otherwise, of what it represents, increases its worth in our eyes. Karl Marx wished to measure the value of the product by the amount of human labor incorporated in it. This theory is

economically contestable, since very different considerations contribute to determine the formation of prices on the market. But, in matters of sentiment, it is true that we seek to retain, in the object acquired, the habit contracted, the theory elaborated, the memory of our efforts. For example, may not the principal reason for our attachment to certain branches of culture lie in the trouble their acquisition has cost us? We do not like so much effort to be wasted. Value is measured not only by the achieved products but by the authorized expense.

And is it not, moreover, necessary for value to be, as G. Simmel claims, some distance from us, before it can stand out distinctly or become somehow incarnated in things or ideas, tools or formulas? According to him, the very moment of enjoyment, the moment in which subject and object wipe out the opposition which subsisted between them, absorbs the value. This latter reappears only after being separated from the subject and opposed to it as object. In enjoyment, subject and object blend together, and value is, as it were, absorbed. It reappears, it becomes clear to us, from the moment in which we feel the difficulty of acquiring, the fear of losing, the necessity of struggling to retain. The effort things cost us gives us the idea of a sort of resistance on their part. And, in the world of values as in the world of external realities, the feel-

ing of being resisted impels us to exteriorize our representations. The less easy the possession, the more the value stands out in relief.

From all this, we see that the mind has more than one way of getting outside the circle of temporary impressions. Sometimes estimating the advantages, sometimes remembering the costs, sometimes measuring the resistance, it ever tends, through the multiform work of reflection on the feelings, to project values beyond us.

Thus far, we have been reasoning as though a man were alone in the world. The economists, evoking Robinson Crusoe in his isle, and the moralists, intent on the inner depths and binding up the whole moral life with the reaction of the personal reason on sensibility, have long made use of a similar postulate to explain the formation of the values in their jurisdiction. It is only too easy to show that it is, indeed, merely a postulate, and that in holding obstinately to it, we suppress, by abstraction, facts which are essential for an explanation.

When we replace the individual in the midst of his fellows, we find that his reasons for passing judgments of value about things or ideas are naturally reënforced thereby. We have said that everything which tends to increase the distance between the desire and the object of the desire tends, also, to

heighten the value of the object. Now, the distance in question is often found to be increased by the sole fact that, between the object and ourselves, our fellows are interposed: our fellows easily become our competitors. The extension of the circle of bidders augments the intensity of the demand.

Now, the more a thing is desired, the more it appears, to the individual lost in the crowd, difficult to obtain; and this is often a new reason for it to appear desirable to him. A pet phrase of the economists could well be generalized; scarcity multiplies the price. Difficulty is an attraction. Even political parties find it a useful advertisement to announce that people are turned away from the meetings they organize. Without doubt, there are certain categories of values to which the phrase seems difficult of application, those which, not lending themselves to material consumption, can be shared without being thereby diminished. Is not this the case with programs of ideas, religious, political or esthetic, which offer us, as so many flags around which to rally, churches, parties, coteries of all sorts? Even here, however, competition is at work. The amount of attention which a society commands at a given moment is a practically limited quantity. Programs vie with each other to force themselves on the attention. And it usually happens that the resistance encountered by that one which attracts us, the dif-

ficulties it finds in the way of action, attach us all the more closely to it; we grasp with a firmer hold the staff of the flag which has the wind against it.

Still more clearly is the value of an object, idea or thing, program or instrument, enhanced in our eyes, when we see incorporated therein, not only the result of our own personal effort, but that of an indefinite host of collaborators. Let the effort of our contemporaries but be added to that of our ancestors, let the host of collaborators conjured up but take the aspect of a procession of generations whose origin is lost in the past, then the product of this collective, anonymous and secular work readily takes on something of a sacred character: to let this heritage be lost would seem to us not merely a fault but a sin. Is not this the principal origin of the veneration in which we hold our native land, the land of our forebears? By all that it has drunk of sweat, of tears, of blood, it is, as it were, impregnated with an august value.

But our native land is not only the land of our fathers; it is the land of our sons. We glorify it not only for the past it incorporates but for the future it prepares. And, here again, the rays of the aureole are multiplied, values are increased when, to individual perspectives, social perspectives are added. A value is, we said, a permanent possibility

of satisfactions. But my mind does not necessarily relate it to my sensibility alone. It is precisely this conception which renders me capable of feeling for others; I respect the spring in calling to mind the unknown travelers whose thirst it will quench. A country or a principle, an ensemble of institutions or a system of beliefs, is invested with limitless value if we see, therein, permanent possibilities of satisfaction for a whole people. The veneration for wheat and for bread, the hymns to labor and to liberty imply this widening of the imagination which challenges the future and embraces the multitude.

Thus, we find the projection of values singularly facilitated by the action of sympathy as well as competition, by the memory of past coöperations as well as the hope of future communions. The social atmosphere is especially favorable to the formation of these complex constructions the intelligence builds up from the data of sensibility.

We may go further and ask whether these constructions could ever have been built up without this social atmosphere. Should we content ourselves with saying that the presence of our fellows, coöperators or competitors, renders easier the play of the mental mechanism which exteriorizes values? Without society, would this mechanism have functioned, or even have been constituted? When we call to mind

the action of the human intelligence on the sensibility, and that of our fellows on our imagination, there still remains much that is mysterious in the constitution of values: and it is, perhaps, from those forces of a special nature which are born from the social life that we must demand the key to the mystery.

If values appear to us as realities, independent of our temporary impressions and our changing desires, the principal reason is, doubtless, that they tend to force themselves upon us in one fashion or another. Neither in religious nor economic, moral nor even esthetic matters do we appraise *ad libitum:* our personal preferences encounter resistances, find established orders. G. Simmel has observed that the reality of value consists in a claim: it demands recognition. Durkheim strongly stresses this point. Judgments of value are, for him, objective because they are imperative.

But if they are imperative is it not because they are collective? Where could they obtain the compelling prestige with which they seem, in varying degrees, to be invested, if not from that special force which emanates from the coming together of consciousnesses? From this we gather that, in order to understand the sort of authority proper to values,

it is necessary to understand, first of all, how the *collective consciousness* is constituted and how it acts.

What realities can we bring under this term, collective consciousness, which is the bone of so many contentions? The very bringing together of the two terms, consciousness and collective, gives at first glance the effect of a paradox.

It is not to be doubted that consciousness presents itself to the civilized man as that which is most personal. Sensations and ideas, desires and volitions are related to a "me." Around this axis, these elements are organized. And the type of synthesis thus constituted never arises elsewhere. But this does not mean that individuals are so many islands condemned to a splendid isolation. The romantic exaggeration of such a thesis is obvious.

Let us imagine that a certain number of our contemporaries permit us to take a rapid inventory of their mental furniture. It is quite clear that we shall find, among those who have lived in the same social sphere, seen the same sights, read the same books, been kindled by the same enthusiasms, a number of common ideas which are, as it were, interchangeable from one consciousness to another.

A common set of ideas, that is what we can, to begin with, call a collective consciousness. Perhaps instead of saying a set of ideas it would be better

to say a system, and one which is, itself, the result of a synthesis; for the ideas we meet again and again, in a crowd of consciousnesses, do not remain inert and separate like material things. They enter into relations, react upon one another, compose coördinated wholes. Thus a whole work is carried on, the result of which is different from that which the work of personal thought would have given. And personal thought when it awakens is, as it were, limited in advance. It has always to reckon not only with materials, but with forms which are never its own work, nor that of any single individual. They express an intellectual life which is a group life.

In short, the tendencies which the sociologist assembles under the term, collective consciousness, are for him not only common but fundamental and dominating.

When individuals come together, not only do I recognize many common elements in their consciousnesses, but I find that, by this very coming together, new products are brought into being. To arrive at collective consciousness, it is not enough to take the sum of the parts common to individual consciousnesses: from the association of men is released a force capable of exercising pressure as well as of attracting; and it is precisely this original force which we see at work in the world of values.

We experience the effects of this force; is it pos-

sible for us to see it in formation? Can we see it in the nascent state? It has often been observed that, caught in a crowd, hurried along in its current, the individual soon comes to feel as though taken out of himself. He is carried away by emotions to which, if left alone, he would never either have raised or lowered himself. He experiences bursts of enthusiasm or accesses of brutality of which he would never have believed himself capable.

This force which is released by the crowd is more or less clearly known, since its effects are anticipated. The majority of those who go to meetings go not merely to express their faith, but to be confirmed in it, through coming into contact with others of like belief. In the famous "revivals" of Wales, in 1904, people came together expressly for this sort of exaltation: it was necessary for them to dance and sing together in order to get the feeling of communion with the divinity.

But it would be a great mistake to suppose that only the momentary contacts, multiplied in a crowd, produce such effects. The crowd is the lowest stage of society. It is society amorphous. In a strongly organized society the reaction of the group on the individual has every chance of being more powerful.

To pass from one extreme to the other, we have only to think of that force which is called the spirit of the regiment. Hallowed usages, glorious memo-

ries, a collective self-respect, give a particular bent to the discipline. Not long ago, whoever took the uniform of the twentieth corps, thereby acquired a special "go." And even when almost all the soldiers who composed it at the beginning of the war had been replaced, the twentieth corps retained something of its moral physiognomy.

With how much greater reason does a nation mark us with her stamp and make of us the chosen servitors of certain values. Nor has she need, for that, of setting up the discipline of a regiment; her methods are far more varied and flexible. She holds us more by love than by constraint. So much and so well that, in certain hours, we feel ourselves truly identifying our life with that of a collectivity wherein it is ready to merge itself.

Recall the hours of mobilization and of the armistice. Who, in those two historic moments, did not feel himself carried along in the current of irresistible feelings! Those forces were active the whole duration of the war. They helped the soldiers to make the supreme sacrifice. Jules Sageret, in his book on the philosophy of war, makes the assertion that, at that moment, the "bee-man" triumphed over the individual man. The Spirit of the Hive succeeded in dominating, through the conspiracy of collective sentiments, the reason even of the critical.

The creating of an ideal, that function which, according to Durkheim, is the highest and the one which is characteristic of societies, can doubtless be explained by syntheses of this sort. Let us read over again the conclusion, now very celebrated, of the *Formes élémentaires de la vie religieuse;* here, again, we come across this idea that superior values can be derived neither from the mere properties of things, nor from the mere faculties of the individual. It needs the action of that fiery furnace which is constituted by the coming together of consciousnesses. If each individual consciousness feels itself dominated by the ideal, it is because no one of them in particular, has created it *in toto.* It is a law for the personal life because it is an emanation from the collective life.

These reflections enable us, perhaps, to measure that which a characteristically sociological explanation adds to those which are purely psychological or even interpsychological.

In studying the formation of judgments of value, we are no longer content merely to enumerate the faculties of the intelligence reflecting on impressions, remembering, foreseeing, abstracting, generalizing; nor even with recalling those reasons for adding to the value of things, perception of which is elicited in the individual by contacts with his fellows, coöperators or rivals. We seek beyond individual con-

sciousnesses for the source of the authority with which values are invested. However, we do not look for it in an abstraction unconnected with their experiences, but in the synthesis, productive of new properties, which is formed by their association. This is an entirely psychical operation, since the elements of the synthesis in question are always consciousnesses. Yet by merely brooding over the personal soul and utilizing only those of its laws revealed by inner analysis, we would never have succeeded in explaining the veritable mystery of judgments of value, the power of imperative coördination with which they are, as it were, charged by the collective realities whose tendencies they express.

Many, in criticizing this point of view, will question whether there is not, in this linking of values to society, something which offends the conscience. They will have it that we present merely as so many military orders, those appreciations which serve as supports for our whole spiritual life, and that we seem to subordinate the very life of the spirit to society, regarded as a great being, endowed with resistless power. When Durkheim, not long since, in formulating the *Règles de la méthode sociologique,* gave "constraint" as characteristic of social realities, his definition did not pass without raising

similar protestations. But little more and there would have been a cry of corporalism. Many seemed to think that Durkheim represented society as a sort of superior policeman enforcing order only by the lash of imperatives. Let us endeavor to dissipate the obscurities on which this interpretation rests.

Is it really a disparagement of the spiritual life, to point out, in the values which dominate it, the products and instruments of the social life? Perhaps so, if society could be considered only as an organism, more voluminous than others, whose irresistible power was entirely devoted to forcing its material interests to the fore, and which would subordinate all desire for the higher life to its mere will to existence.

But why should any one wish to keep sociology irrevocably bound to this organicist conception with its materialistic leaning? Social beings not only seek to prolong their own life; they work to render a higher life possible. They not only defend material interests; they make possible the domination of an ideal.

When a common life is organized, the new forces which are liberated are forces of a spiritual nature which overflow from the individual souls. The values which are constituted when the thoughts of men are made to converge order their desires and

subordinate lower to higher impulses. A world is opened up which their aroused imaginations people with majestic forms, at once alluring and redoubtable. The "category of the ideal," as Renan calls it, begins to function. People learn to respect certain things or beings in common. And these common respects are so many steps which aid the ascent of the individual: by means of them he raises himself from animality to humanity.

It should be noted that without these rallying points—these stars—society, the synthesis of consciousnesses, would lack an ordering principle. The existence of superior values, exacting universal reverence, is a condition of its very life. And this is why Durkheim, in the conclusion of his *Formes élémentaires de la vie religieuse,* was able to write, "A society can neither create nor re-create itself without, by the same stroke, creating something of the ideal."

Here is one who explains and justifies, and makes quite clear and specific, that sort of compelling power which he recognizes in society. It compels only because it helps. And its authority, far indeed from being something exterior to the spiritual life, commanding only by eclipsing it, is born from that very spiritual life.

It follows from this that to invite men to respect society is not to demand that they prostrate them-

selves before a sort of enormous animal, but before a great flame which mounts toward the heavens and which is kept burning by souls in communion.

We could further express this same essence of the social life by pointing out that its distinctive product is civilization.

When we speak of civilization, we mean the constitution of a human world superior to the animal world. The effort to constitute this superior world begins very early; as early, doubtless, as human societies exist. The expression, uncivilized societies, is ambiguous. In the most primitive clans, we see at work rites and orders which "train" men through bringing them into association. Beginning with this phase, ideal values are set up. But in proportion as social acquisitions increase, the interests of civilization gain immeasurably over the purely natural. The social life implies ever richer and richer series of initiations.

"We should remember what we owe to the book and the tool," said Léon Bourgeois, not long since, hoping through the idea of what the individual owes to society, to revivify the sentiment of social duty. Sociology takes up and thoroughly examines this thesis of solidarity. In showing us the roots of the tree of values, it reminds us that society nourishes not only our material but, much

more, our spiritual life. Beliefs and myths, legends and romances, scientific theories and philosophical systems are so many steps for the spirit. It raises itself only when sustained by the original forces born from the group life. This is why, when the group strives to impose upon us respect for a certain number of values, we must not say merely that it calls us to order; it maintains at our disposition means to progress.

Values are not so many dead weights which oppress us, burdening our breasts; far rather are they magnets which draw out, and are worthy to draw out, our convergent efforts. And the sociological theory of the projection of values, realizing this, will not have it that they are exterior things of a material nature imposing themselves by brute force, but insists that values, being products of a sort of synthesis of consciousnesses, are always principles of incessant regeneration for the spiritual life as well as instruments of communion.

CHAPTER III

VALUES AND EDUCATION

In investigating how values become realities, that is to say, why judgments of value are presented as objective, we have begun to comprehend the social function of these judgments. We have said that the authority with which they are invested shows that they bear within them something of that special force which results from the synthesis of consciousnesses. Let us add that they tend naturally to give continuity to this latter. They are the appointed instruments of coördination. The system which they form constitutes what might be called the invisible framework of society: they create for it a soul. No society can endure without these principles of communion.

To speak of society is to speak not only of exchange of services, or collaboration of forces, but also of communication of sentiments. Men are intimately associated only when they have a number of things to respect in common. A civilization is not merely an assemblage of means of which humanity makes use in its operations on nature; it is a system of ends designed to make individual

activities converge. The maintenance of a sacred fire is a vital necessity for every society.

This maintenance is so much the more necessary in that society, by the very fact that it is a living thing, is made up of perishable elements. "The generations of men pass as the leaves." From this fact arises an incessant mobility which creates quite special conditions of existence for social beings. It has often been remarked that the succession of the generations is a natural cause of social renovation. Would not humanity run the risk of going to sleep, of becoming, as it were, petrified, if it were composed always of the same men with indefinitely prolonged life? Old men seldom welcome novelties; "gerontocracy" is, by definition, "misoneist." Youth, on the contrary, dreams of changing the face of the world. Each generation comes with the determination to say its word, to try out its formulas. This causes societies to go ahead, to change their usages, to reform their institutions.

It is clear, however, that this effort of modification implies a preliminary mechanism of transmission. One reforms only the given; one works only upon history. This is why the prime condition of all progress is always a tradition. Society is forever occupied with regaining lost ground, with recruiting new torch-bearers. The double law of

death and birth makes it necessary for it to be continually recreating itself. At each death the thread of traditions, conditions of collective life, is cut. At each birth it must be retied. From the newborn child it is necessary to make a social being. Humanity must be re-grafted on nature.

Perhaps we may find that the task is less complex and less difficult than it seems at first glance. For nature, even here, in this very work which wishes to go beyond it, remains the servant of human society. Heredity comes to the aid of education. Races are constituted. And when biological similarity is originally lacking to their representatives, historical assimilation kneads their organisms on the same model. The effects of the social life are, one would think, automatically registered on the very cells. Thus the child born into a society brings to it a certain number of predispositions, capacities and tastes which make him adapted to it in advance. He has certain ideas, certain judgments of value "in the blood." A civilization is, as it were, deposited in his brain and in his heart.

To define exactly what heredity is capable of contributing is a singularly difficult task. Biologists and psychologists have already disputed about it. It will be a bone of contention for a long time to come. There is one point, however, upon which agreement seems to have been reached. It is that

the qualities which the parents have been able to acquire during their lifetime—in the exercise of a profession, for example,—are rarely transmitted to the children.

A second point forces itself on the attention; even though the child born into a society brings to it, at birth, a certain number of aptitudes, these aptitudes would remain dead letters without the form and direction furnished by education. It is this which makes them pass into action by proposing to them definite ends. Whatever virtue we may accord to heredity, it is still a fact that the being with which society has to do, the human child, is of all creatures the one whose actual abilities at birth are proportionately the least in comparison to the multiplicity of acquisitions which await him. The remark of Lucretius holds true; the human child is, of living things, the one who comes into the world the most helpless, the most unarmed, the most incapable of sufficing unto himself. No newborn creature requires greater care. No other has such need of an atmosphere of kindness and good will. Hands clasp around cradles. The child would thus appear to be, in some manner, the creator of human society, by the very fact that he forces it to concern itself with him for a long time.

Those who have preceded him in life must stay grouped to aid him. But they do not aid him for

himself alone; they aid him for the group. They work to mold a being able to live in society and in whom society may live. This "second birth" implies, we said, that the child should learn to esteem an ensemble of values. The statement, of itself, gives some indication as to why certain methods of education must appear insufficient to societies,—namely those which are concerned only with the body and those which address themselves only to the intelligence.

Training is the operation which limits itself to inculcating certain habits in the child. It is not impossible to lead him, by repetition, to go through the motions appropriate to the end desired, without even explaining to him the reasons for the act or leaving him any latitude in the choice of means. This amounts to installing, in the human being, a series of mechanisms which might come in time to complete or replace instincts. Carried to the limit, the process, if successful, would result in the creation of social automata.

Should this, then, be the ideal of education? There are some to-day who waste their breath in telling us, over and over, that the supreme art for education is to "make the conscious pass into the unconscious," and the "psychic into the organic." We can hardly accept the idea that society, to assure

its existence, must transform men into so many machines.

Indeed, if economic organization tends, as Marx said, to transform a whole class of men into appendages of the machine, humanity will raise a protest. We would feel as though Matter invaded Society and tried to ravish certain of its constituent parts.

As we have said before, the existence of a society is, above all, of the spiritual order. It requires not only combinations of mechanisms but communions of minds. This means that every method of education which tends to kill the spirit works against its essential end.

It will be suggested, then, that we should replace training by instruction and broaden the intelligence as much as possible; make known to the child the rich variety of the world and of its history; inform him of the properties of things and of the conquests of the intellect. The system formed by these ideas could become the center of a really human culture, and the beings participating in this culture would be associated in the most intimate fashion through their high faculties. It is on men's brains that the true society must rest.

There is no disputing the fact that the intellectual capital, transmitted by instruction, is a principle for drawing people together, and for drawing them together through their inner selves. The ideas

acquired and propagated through the progress of the sciences are so many connecting links between minds. Auguste Comte perceived this truth clearly. And he maintained that we could not think of reorganizing society without having constituted a solid mental homogeneity, without having brought intellects to bow down together before the same scientific laws. Intellectual agreement is one of the conditions of social harmony.

But, are we to say that it should be the only condition? Or that, in order to make people respect the whole complex of values which constitutes society's best reason for existence, it is enough to appeal to the intellect and let the facts presented by science speak for themselves? Does not all education normally carry, along with instruction properly so-called, or communication of scientific ideas, a *suggestion of feelings?*

The same Auguste Comte who consecrated twenty years of his life to constructing an edifice of intellectual agreement, felt it necessary to warn us that we act profoundly only upon, and by means of, feeling. It is not enough that the same ray should enlighten intellects. For a society to feel itself a unity, hearts must vibrate in unison. Convergence of minds, without doubt, contributes to prepare, but it does not necessarily create, convergence of appre-

ciations. Now this latter is a vital condition for human groupings.

This is why regard for the values which are to be made respected occupies the foreground of education in every known society. All education is *initiation*. In primitive societies, this initiation corresponds to a solemn ceremony, and the rites which compose it—trials, lustrations, changes of name—signify, clearly enough, that the child, in some fashion, sheds his pristine personality to acquire a personality quite new. By participation in the beliefs and obedience to the rules of the tribe he becomes a man.

Even when these ceremonies disappear, the work of communion of feeling, of which they are the symbols, continues from generation to generation, in societies the farthest removed from the primitive clan. Diffused or diluted though it may be, initiation is incessant. We pass our time pointing out to the new-comers—whether indirectly by our example and gestures or directly by our counsel or reprimands—that which is worthy of admiration, that which merits contempt. Moreover, it is not only in matters which are clearly moral, but quite as much in those which are esthetic or economic, that these suggestions are repeated, through force of circumstances, at almost every moment of the day. We

could not, even if we would, keep from teaching our children to admire, as we teach them the relative importance of different wants. To permit or deny ourselves a certain sort of refreshment is to orientate the sentiments of the witnesses of our lives. Usually, moreover, these influences have no need of formally expressed principles to have their effect. But when, reflecting upon them, we try to bring them from the dark into the light and formulate the tendencies they obey, we arrive, not at pure and simple judgments of reality, but at judgments of value.

All this amounts to saying that instruction, properly so-called, does not give societies all they have need of, any more than does training. It is, above all, by the transmission of evaluations that they perpetuate themselves.

It may seem that this conception of education hardly agrees with what we expect, or what, in our societies, we demand of public school teaching. It is understood that this must be neutral. And this neutrality is held to be the prime condition of national peace. It is said that, in a country where religious beliefs and political opinions are free, it is not well for the instructor to be called upon to pronounce upon the great questions which are likely to cause divisions in the group. Should judgments of

value dominate his teaching he will please certain families and offend others. If he does not wish to depart from neutrality, he must be careful not to depart from objectivity. It is worthy of remark that, after the war, more than before, many seem disposed to insist on these requirements. In Catholic circles, the hope is often expressed that, in memory of the sacred union, traditional beliefs will be more respected by the laicizers. At the same time, in socialist circles, is to be seen the fear that a biased instruction would work to check the progress of the working people.

Many will think that the remedy lies in science itself. They would have us extend the scientific spirit to moral instruction and, in this matter, also, seek to confine ourselves to objective statements. By this scientific teaching no father of a family could be scandalized, any more than he is scandalized, to-day, by the teaching of physics or chemistry.

Does not the recent progress of sociology seem well fitted to authorize this hope? The "science of ethics" has accustomed us to the idea that morality, also, is a fact which can be studied, not only through theories but through institutions. Values, themselves, do not fall from Heaven. We can seek to determine, by the comparative method, the conditions of their formation and of their variations. If, face to face with these facts, as with all others, we

take the objective attitude which has made possible the progress of science, no one can accuse our teaching of being prejudiced.

It is certainly a great advance to attach moral sentiments neither to artificial conventions nor abstract constructions, but to the social life itself. At once they appear as spontaneous products and also as natural instruments of that life. To root them, thus, in reality is to begin the work of sheltering them from anarchistic fancy; it is to give an excellent reason for considering them respectable. With facts such as moral facts, every intelligence, disciplined by science, must at least reckon.

Is this to say that the discipline of science should suffice for moral discipline? To take an objective attitude, to abstract ourselves from our personal preferences and the impulsions of our feelings, in seeking to see things as they are, is, to begin with, a sort of purification not to be disdained. Morality, as we shall see, can draw from it more than one benefit, direct or indirect. It is doubtful, however, whether it would be possible to draw from this single intellectual virtue—however largely one might conceive it—all those virtues of which societies have need. In particular, if individual activities are to converge, there must be sympathetic impulses which science, by itself, would not be able to create. For science begins by systematically

pruning off all sensibility. Thus, a teaching which was content with tracing out the history of values, even if it added to this history a sociological analysis, could not accomplish the initiation which society requires. To make understood is not to make loved. Judgments of value are not deduced, just as they are, from judgments of reality. Should the educator content himself with stating and explaining the existence of the patriotic sentiment as a fact? If he does not share in this sentiment he cannot impart it. Likewise, he can prove that, upon certain societies, the regard for social justice imposes transformations ever more and more profound. But if he, himself, does not see progress in these transformations, if he does not desire the movement to continue, he will not contribute to awakening the desire for justice among his pupils. In short, *there is no moral education without communication of feelings.*

It would be advisable to distinguish between the grades of instruction, in order to measure the respective shares which should be allotted to feeling and intelligence. The critical spirit, itself, represents a value, and that of the first order, in our liberal societies. It is, then, natural that we should not wish young people to quit school without being prepared to think for themselves. The higher education, in particular, if it must not only put them in

touch with the results of science but teach them how science develops, will legitimately inculcate in them the habit of stifling all feeling when it is a question of truth. But before this white and cold summit is reached, there are all sorts of slopes to climb for which the support of traditions which arouse emotion is not superfluous. To aid humanity to free itself from animality, through the agency of a social capital, is the task the elementary school must assume. To succeed in this it is necessary to interest the whole inner life of the child and orientate his appreciations as well as his acquirements. "A civilization," writes F. Rauh, "is a tissue, not merely of notions or ideas, but of feelings. It is with this spiritual substance in its entirety that the pupil must become thoroughly permeated." To this end, we should, as G. Lanson puts it, "keenly desire that general well-being which is the goal of collective action."

But this well-being, itself, is not fixed once and for all; and it is important that the collective goals of to-day should not hide from us the collective goals of to-morrow. It is for this, doubtless, that those people are anxious who demand that, even in the elementary schools, all biased instruction should be guarded against and no preferences put forward. They think this the only way to be just to all tendencies and to protect the future.

The method would have at least one fault, that of being totally impracticable. In the first place, even though we took for our ideal the reducing of education to instruction; instruction, itself, implies that we choose for the child. As Alfred Moulet justly remarks, to teach him to read and to reckon is already to choose for adaptation against uncultivation, for society against nature: it is to place the new-comers directly in the way of evolving in a certain civilized atmosphere: it is to incorporate them therein in advance. And then, above all, where could a teacher be found who would be content to be only a brain and to give nothing but instruction? Admitting that he could be found and that he would keep himself from any direct moral teaching, he could not, in speaking, help passing a thousand judgments of value on things and persons. Should he do his utmost to avoid passing these judgments, his actions would speak for him. His preferences would always be known. Abstention, in these matters, is only an appearance. Even though he should consistently wear the impassive mask of science, a teacher is always the servant and, therefore, the apostle of an ideal. We have said that the transmission of values is indispensable; it is certainly inevitable. Not to take this fact into account in making up our programs and choosing our methods of teaching would be absurd.

Certainly, we could not maintain, without grave confusion, that sociology justifies any such omission. To study, by scientific processes, the conditions of life of societies is not to postulate that societies, to safeguard these conditions, should employ only scientific processes. In fact one of the clearest lessons of the science of ethics is that, always and everywhere, customs are maintained by a whole system of suggestions, attractions and pressures which act on the feelings. Is it likely, then, that from the moment a science of ethics was constituted, societies would no longer have need of the system which gives them life? In any case, a sociology which places the creation of an ideal at the heart of all judgments of value, and assigns this creation to societies as their supreme function, would be little logical in subscribing to such conclusions.

When a Durkheim rejoices in the holidays which are instituted to commemorate the great moments in a nation's history, when he anticipates the movements of exalting effervescence, where values are recreated in the hearts of societies, he lets it be seen that his thought, on this point, also, is very near that of Auguste Comte. If he maintains that the hour is decidedly past for those great religious constructions of which Comte dreamed, following the Saint-Simonians, he does not believe that the fount of great collective emotions—such as patriotism or

socialism, for example, give rise to—should henceforth be dry. He hopes that souls, for their social regeneration, will continue to bathe themselves in springs such as these.

"The French public school teacher is at the service of a divided society," writes F. Rauh. And it is, for example, only too clear that at the present moment, it is difficult to arrive at any agreement as to the significance and rôle of religious beliefs, and even as to the place of religion in the state. It has been found necessary to seek the grounds of national harmony outside of the creeds which compete for souls. Moreover, edifices built even on this ground are not built for eternity. Nothing can any longer exclude the idea of new arrangements, even of integral reconstructions. Our society wishes to be progressive. It means to respond to the aspirations of the masses and to have regard for the future no less than the past. This constitutes a source of new difficulties for the teaching of values. On the one hand is the religious question, on the other, the social; between these two fires, between these two sources of discord, we must somehow safeguard the peace of the hamlet where the society of to-morrow is being prepared in the hearts and minds of the children of to-day. How great, in many cases, will be the embarrassment of the

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teacher who, in the school, before the new generation, represents the nation! We remind him that, as maintainer of the social bond, he has values to transmit. But how is he to know which?

The sociologist is not without hope of helping, here, in orientating the minds of the educators. We have said that it is Utopian to attempt wholly to replace appreciations by evidence in our teaching; and that, in consequence, the spirit of scientific research could not render useless the communication of feelings. But scientific research is undoubtedly capable of giving us valuable guidance as to the nature of the feelings to communicate, in the type of society in which we live, and at the phase of historical evolution at which we have arrived. The judgments of value which make consciousnesses converge are formed under the empire of certain social conditions. And when societies are transformed, differentiations are produced, or conjunctions great with consequences. The various tendencies expressed by judgments of value, here contradict themselves and there coördinate It is important for educators to be informed of these diverse possibilities. Knowledge of the laws of the evolution of values would throw light upon the selections they must make for the exercise of their social function.

CHAPTER IV

THE DIFFERENTIATION OF VALUES

He who gives himself up to a research on the kinds of values is soon driven to the conclusion that, according to the phase of evolution, the boundaries between kinds are more or less clearly defined. It seems easier to fix these boundaries in the phases nearest to us. Values *become* different. The economic world breaks the bonds which attached it to the religious world. Art claims its independence even of morality. The groups of ideas and institutions which serve diverse values tend to constitute so many autonomous systems.

The law of differentiation seems, then, to be verified in this immaterial world as it is in the material. The social experiences concentrated in judgments of value and the aspirations they interpret, their double cortege of memories and hopes, the satisfactions they promise and the obligations they impose, all this *complexus* of imponderables may be submitted to the same law as living beings. They may be regarded as so many invisible organisms which in

providing themselves with more and more specialized organs, distinguish themselves, increasingly, the ones from the others.

Does this mean that there is no limit to the generalization of evolutionism? Long ago, the law of dissolution was opposed to the law of evolution. The latter accentuates, the former rather tends to efface, the diversities of forms of being by leveling and assimilating. This tendency is easily verifiable, as Lalande points out, in the order of inorganic matter, as the law of the degradation of energy, among others, shows. What is worthy of note is that reason, once awakened in the minds of men, takes over in its fashion this work of assimilation and tends to free us from the differentiations life imposes. Thus, as Cournot liked to think, the world of living things would be an intermediary stage; and certain laws, valuable at this stage, would be meaningless for higher as well as lower stages.

It will readily be granted, to-day, that the law which makes beings pass from homogeneous to heterogeneous is not the universal and unique law. That it commands the evolution of species is not sufficient reason for its being applied, without change, to the history of ideas and feelings. Through the development of reason, all sorts of novelties have the chance of imposing themselves. And it is quite possible that the reign of humanity

may raise many obstacles in the path of differentiation.

We shall, ourselves, have occasion to show that systems of values, in spite of the relative independence they acquire, do not cease to conjugate, in some fashion, and that they lend each other various sorts of support. But one tendency does not annihilate the other. Forces of different meanings, even of contradictory meanings, may be at work together. Far, indeed, from being the exception, this is rather the rule in the social world. Let us seek, then, to establish, first of all,—free to correct or complete this "law" by others—in what sense and in what measure human values are differentiated.

To ascertain the fact, it will suffice to bring together the two ends of the chain of evolution and confront a mental state of a primitive with a mental state of a civilized man.

Not to mix things, to be able to place oneself at different points of view, to respect, without confusing them, the various rules of the different orders of activity in which one participates is, infallibly, a sign of high culture. To prevent our feelings from overflowing from one line to another requires a certain capacity of inhibition and of specification which implies a pretty complex mental life. The popular saying, "Business is Business," and the pro-

gram of "Art for Art's Sake"—whatever the distance between them—both express the need the civilized man feels of distinguishing between the different kinds of values. He who misunderstands distinctions and mixes criteria—putting himself, for example, at a political point of view to judge an economic enterprise, or at a moral point of view to appreciate an artistic effort—gives the effect of being painfully obtuse. Good physical culture teaches us to use, for certain types of exercise, only certain sets of muscles; it specializes our efforts in order to obtain the maximum result from them. In the same way, a cultivated mind knows how to canalize its tendencies; it remembers that, to appreciate things and people, ideas and institutions, it is necessary to be able to use sometimes one criterion, sometimes another. To observe this distinction is the sign of a sort of superior liberty.

From this it can be seen that we would not be disposed to accept, at its face value, the entirely quantitative definition sometimes proposed of the *spiritualization* of tendencies. The spiritualization of which Paulhan speaks, for example,—and which, according to him, so often goes along with socialization—would be measured, it seems, by the growing number of psychical elements, images or ideas, emotions or resolutions, which agglomerate, in some fashion, around primitive instincts. Thus

an absorbing system would result which would draw other systems to itself in dissociating at need their elements. Such is, doubtless, the way in which passion progresses; when it succeeds in invading the whole soul madness is near. But the normal man of to-day instinctively resists this sort of compenetration of systems, the coexistence of which is one of the conditions of his inner equilibrium. And he is aided, in this resistance, by the pressure of society which has need that we should know how to specialize appreciations.

This specialization does not prejudice, however, the solution of a problem which confronts every one and which different types of minds resolve in quite different ways. How are we to maintain together systems of tendencies which have their center, some in one category of judgments of value, some in another? For many, the simplest solution is to have a system of compartments. They lay out their day, a part for art and a part for business, this for the world and that for religion. Between these various spheres, they install stanch partitions. They permit no trespassing from one to the other. This explains why if there were contradictions among them the individual would not notice it.

Not every one can easily acquiesce in this lack of organization. There are those who suffer from it and who wish, at any price, to recover, even in the

diversity of tendencies, the principle of unity without which their spiritual integrity seems to them to be menaced. Let us add that there are values which resist being reduced to their proper proportion. Morality is determined to have its say as to the whole of life, the part it is necessary to concede to other values, their place in the hierarchy. All this leads to the development of those intellectual constructions which have for their object to bring back a sort of superior harmony into the life of the spirit.

But, intense as this need may become, it does not, we believe, do away with the differentiation of values which corresponds to the progress of culture. To harmonize is not to deny differences. And to say establish a hierarchy is to say conserve distinctions. An inner unity which could be acquired only at the price of confusion of values would render the individual almost unadaptable to a social life as complex as ours. The ability to specify values is at once the product and the condition of civilized life. One of the proofs which could be given of this is that nothing seems more lacking to the primitive man than this very capacity. Not at all that he is entirely given over—as was long believed—to instinctive impulses. He acknowledges multiple rules and even understands the construction of quite complex ideas. The place of myths and rites in primitive societies is ample proof of this. But where he

fails is in distinguishing kinds and instituting logical relations among judgments, abstraction being made of adventitious associations of ideas.

Lévy-Bruhl, in order to make clear to us the special characteristic of this mentality, has proposed the expression, *participation.* For the savage, all participates in all. There is not a being which could not become other than it is, even to being transformed into its opposite. The boundaries between categories are fluctuating. The visible and the invisible, the thing dreamed and the thing perceived, the living and the dead, the part and the whole, are easily confounded. This is doubtless because the primitive man rises only with the greatest difficulty to the level of pure representation. Governed by the emotions to a degree we can hardly comprehend, he mixes with his ideas his desires and aversions, his hopes and fears. Think of the tumult of emotions which must be awakened in him at the sight of a wolf, a weapon, a flash of lightning. It is not to be wondered at that, in his make-up, a "logic of feeling" dominates which does not recoil before any confusion. Add to this that his ideas are rarely personal products produced in solitude. In primitive societies, thinking is done largely in common, and under the influence of a collective exaltation which has only too great a tendency to jumble everything together.

Thus, thought, in the earliest stages, must find great difficulty in separating judgments of reality and judgments of value. To determine the quality of a thing, methodically setting aside the feelings it awakens in men's hearts, is a delicate operation which does not become habitual till fairly late. But to distinguish between the different kinds of feelings a thing can awaken is, likewise, a difficulty not to be surmounted at the first attempt. Judgments of value are, then, but poorly distinguished from one another, as they are but poorly distinguished from judgments of reality.

In truth, as early as the remotest phases to which we can go back, an antithesis has grown up; things sacred and things profane are separated as by an abyss. We know of no animal society which possesses rites; inversely, there is no human society which does not possess some. The primitive soul, far from being abandoned to pure instincts, is encumbered with scruples. It believes itself under the surveillance of obscure powers whose mandates make it tremble. And it is around these mandates that men's first ideas of good and evil are systematized. But this very systematization, operating at an hour when the human mind is little capable of setting up partitions, makes the distinction between the various categories of good or evil extremely difficult. All values gravitate, from near or far,

around the altar. Whoever possesses the mysterious sort of fluid which emanates from the sacred world—the mana—should succeed equally well in economic enterprises, in military expeditions, in amorous intrigues. Religion mixes itself in everything, dominates everything. In the *Grève de Samarez,* Pierre Leroux, after describing the occupations of the Egyptian priests connected with a temple, adds, "It was science, art and industry, united, this temple and this priesthood." And Spencer noted that the priests were not only the first judges but the first doctors and the first astronomers. The functions formerly pertaining to the priesthood are being made specific. So will be made specific the values primitively unified by religion. The differentiation of values keeps pace with the division of labor.

However, to make possible the formation of minds more or less compartmented, such as those we have described as being characteristic of an advanced state of civilization, it is necessary that social evolution should take certain directions: there are some which would conduct to no thoroughfares. Differentiation of values could, like division of labor, itself, specialize souls and imprison them in one zone, forbidding them all others.

It is a well known fact that in portioning out

tasks among individuals, society tends to class these latter, to divide them into groups which, having no longer the same occupations or the same preoccupations, no longer envisage the world from the same angle. The saying of Sir Robert Peel, "The progress of industry is creating a new race of men," has often been quoted. It is not only industry, properly so called, which molds those it employs. Every occupation marks its man, internally even more than externally. And when occupations are hereditary, it often becomes as though different races, in the bosom of the same society, divided among themselves the various tasks. The caste system, where the corporation is at the same time a family, and where birth determines the vocation, offers a spectacle of this sort. One witnesses therein, not only a division of labor but a veritable differentiation. Then, and then only, are societies assimilable to organisms, the individual being imprisoned in the occupation as the cell in the organ. There are civilizations which long retain this imprint; and even in the heart of our civilization, there are people who continue to think that differentiation is the real measure of progress. They cheerfully repeat, "Let each one play his organic rôle and the city will be well served." German thought, for instance, has difficulty in getting rid of the organicist conception of the state, of which Hegel, in his manner, gave

the formula. This explains the slowness with which a political life is instituted beyond the Rhine. The observations of Pirenne, who was kept prisoner in Germany, confirm, on this point, the reflections of Andler. The cult of competence is often allied, among the Germans, with a blind respect for power. Tied to their special tasks, they are loath to dispute the word of command from higher up. This amounts to saying that excess of professionalism tends to narrow the common ground propitious to collective action.

But we know well enough that, in Western civilization, the tendency toward differentiation, whatever strength it may conserve or regain here and there, is thwarted or limited in more ways than one. One reason for this is that values, in separating themselves from each other, are far from always constituting, or at least from long retaining, closed circles of adherents resembling each other in every way. To defend a religious ideal, to maintain or propagate a custom, to serve an economic interest, groups are formed, but groups which can be recruited in spheres otherwise diverse. Sects, parties, syndicates, clubs for art-lovers, societies for the advancement of science are so many associations which are not all-embracing but "unilateral"; each of them claims only a part of the individual's life.

A man does not belong to them, body and soul. In their precincts he encounters collaborators who, like himself, lend rather than give themselves, or at least give only a part of their thought and activity while reserving the other parts. There he acquires the habit of distinguishing between that which is and that which is not the province of the groups which bring people together. He respects personal reserves: he learns tolerance, the very condition of coöperation.

It is thus that "social complication" limits the tendency to differentiation.

It is needless to say that this tendency, itself, does not go unopposed. Individuals are not always left free to adhere to all partial societies. Some of these are so absorbing or so intolerant that they hardly permit of division of interest. A group with a professional basis is naturally more monopolizing than a group interested in sport. A political party or a religious sect may go so far as to forbid, to their faithful followers, all collaboration with "infidels." Élie Halévy, in his *Histoire du peuple Anglais au XIX^e siècle,* notes that numbers, when they attain middle class prosperity, desert the ranks of non-conformity: *Dissent* prevents them from associating with the *Gentry*. Up to the present, the fact of being a socialist has, in France, hardly prevented adherents of the party from meet-

ing with adherents of other parties on non-political grounds. But it may come to pass that, in the ardor of combat, socialism will recover the intolerance of a conquering religion and, under pretext of preventing class collaborations, work to constitute a nation within the nation.

In spite of the influences opposed to it, the tendency toward social complication continues to dominate in our civilization. The number of groupings to which an individual may belong goes on increasing. This explains that sort of mental and emotional flexibility which we have called characteristic of the state of mind of the civilized as opposed to the state of mind of the primitive man. One who is not committed to a single grouping is more apt to use, while respecting their differences, the various categories which have been discriminated in the world of values in the course of evolution.

Perhaps these processes will help us to understand certain effects, characteristic of our societies, which are sometimes attributed to the division of labor. Durkheim, for example, attributes to it two moral influences which seem, at first glance, to be entirely opposed to each other; it draws together and it liberates. People whose functions are divided feel more deeply the need they have of each other; and at the same time, they are all equally prepared to recognize the right to differ among themselves.

It is thus that an organic solidarity, respectful of diversities, is substituted for mechanical solidarity which demands resemblances. It is thus that the collective conscience makes itself less burdensome: it comes to authorize or, rather, to exact respect for the individual conscience.

But things do not just happen thus of themselves. In order that people among whom functions are divided should not tend to constitute closed corporations, jealous and intractable; in order that moral bonds should subsist between these groupings; in order that, from one circle to another, men should rejoice in completing each other and should promise mutual help, it is not sufficient that work should be divided. It is necessary that certain values should be respected in common and that, on certain forms of the ideal, men of different professions should continue to have an understanding. Now, is not this understanding favored precisely if men meet with each other outside their own professions, in the various groups—Church or Club, Political Party or Association of Old Soldiers—which put themselves at the service of different sorts of values?

Social complication, by aiding consciousnesses to place themselves, without mixing kinds, at different points of view, reacts against the moral confinement

to which they would risk being condemned by specialization.

The same phenomenon accounts, perhaps, for one of the most original features of modern Occidental societies; the high value accorded to personality in itself.

G. Simmel long ago pointed out that the intersection of social circles can produce an effect analogous to that of the participation of ideas in the Platonic system: at the point of intersection of these circles, the personality arises, rendered somehow original and autonomous by the very diversity of its attachments.

When the various values—scientific or economic, esthetic or moral—instead of remaining as it were grouped together under the control of a single ideal of an imperative religious nature, have conquered their autonomy, more play is left for men's conduct. The rivalry of these sovereigns, to some degree, liberates their subjects. With respect to each of them, they can henceforth guard certain reserves. In any case, it is for them to measure out the part they are willing to concede to each. Thus it becomes easy for everyone to construct for himself, by reflecting on his experience, that sort of hierarchy of ends which any conception of life implies. At the most, by

reason of the very diversity of possible combinations and of the proportions assigned by personal consciousnesses to different sorts of values, these conceptions of life would become private affairs, adapted to idiosyncrasies.

Thus the differentiation of values in society, by taking social complication into its service, would contribute its share toward the differentiation of individual souls. Which amounts to saying that it would, in its way, prepare us to consider the autonomy of the human person as a superior value.

CHAPTER V

VALUES, ENDS, MEANS

Values become differentiated. Economic or esthetic, religious or moral, each sort of value tends to constitute its own proper domain wherein its reign is absolute. It succeeds in recruiting not only clients but patrons. Groups are organized to defend it; institutions are placed at its service.

This is not to say that all relations between these kingdoms are broken off. Coalitions remain possible: they are even the rule. It is rare for a person to serve a single value to the exclusion of all others. Even were it desired, it would be difficult to put into practice. Repercussions are revealed: conjunctions are established.

To understand this new aspect of the relations between values, it is necessary to make use of a new category, that of teleology. We must show precisely in what sense and under what circumstances values can be considered as means and as ends, if they can be distinguished into ends-values and means-values, and what consequences result, for their conjunction, from these distinctions.

Let us try, first of all, to dissipate an objection which may present itself to the reader's mind. If we were to reintroduce considerations of teleology in sociology, would we not run the risk of losing much of the ground gained by science? We are told that all positive science is constituted by eliminating final causes. Sociology has not escaped this rule.

Certainly, the first step, when one wishes to explain an institution, a rite, any usage whatever, is to try to find out what ideas those persons wish to realize who conform to this usage, accomplish this rite, respect and make respected this institution. But has not experience shown us, again and again, that these ideas are varied, much more varied than the forms to which they adapt themselves? Collective habit enters in. And the way in which the individual justifies them to himself is more or less arbitrary. If we wish to explain social matters objectively, we must make abstraction of the ends kept in view by minds which are often the blind servants of forces which go beyond them.

The philosophy of history long ago prepared us for this conception. The theories which explain the development of human history by some transcendental purpose—by the will of a God, by the power of an idea struggling to take root in the world—are led thereby to diminish the part played by conscious purpose. Is it not natural that the goals men assign

themselves should rarely coincide with the true causes of historic movements, since men are led? "There is no human power," declared Bossuet, "which does not serve, in spite of itself, other designs than its own."

Even when the hypothesis of a transcendent power, guardian of a superior design unknown to its creatures, falls, the idea that the ends consciously pursued by men have little explanatory value retains its prestige. Evolutionism easily accommodates itself to this skepticism. Whether it is a question of the transformations of societies or of species, the explanations which evaluate the action of the various forms of competition and selection tend to show us results attained which were not aimed at. Historical materialism is, for its part, willingly anti-teleological. Inheriting the Hegelian philosophy of history, of which it transposes the concepts, it shows economic forces at work before which the thoughts of men weigh little. The ideal ends these latter have in view seem, to it, so many illusions. The *treibende Mächte* are elsewhere. The motive power is in the substratum. Thus is constituted what Masaryk calls "illusionism," the masterpiece of historical materialism. Objective sociology would retain this tendency and push it to its extreme. By refusing to explain institutions by ends, it would complete the elimination of anthropocentrism.

The conclusion lends itself to ambiguities. We must try to dissipate them. It would be a grave error to bind up the lot of sociology with that of epiphenomenalism under any form whatever. The representations which accompany men's activity, even when these representations take the form of ends, are by no means vain shadows or will o' the wisps, appearances without power.

Nothing is more natural than that one should be suspicious of the constructions built up by individuals to explain the institutions by which they find themselves confronted. There is no chance for uninformed reflection to fall accurately, *a priori,* on the true reasons for the existence of institutions; not only as regards their origins but as regards the function they accomplish in society. Does this mean that the ideas of social organization men form for themselves are of little interest? An unlikely hypothesis for whosoever remembers that the true reality of societies is psychical and that ideas are, first and foremost, connecting links. Epiphenomenalism too easily forgets that to treat a fact as appearance is by no means to prove it non-existent or inefficacious. Call them appearances if you like. Nevertheless the reasons mankind gives as justifications for its conduct are not themselves without reasons. They constitute, certainly, very useful appearances. As such, they have a rôle to play, func-

tions to fulfill, and among these latter, perhaps, precisely social functions.

This is what sociology could not fail to perceive through its own progress, when, limiting the materialistic tendency, it accorded a larger and larger place to the study of collective representations. Whatever modifications men's efforts to think in common must bring about in the attitudes of thought, there is no reason why that effort should eliminate the category of teleology. Quite to the contrary, if a collective idea is, above all, not merely an idea shared in fact by many minds, but an idea which is practical, active, conquering, an idea which tends to impose itself in order to imprint activities with a common orientation, it is natural that it should take on the character of an ideal and bind up the norms it would make respected with the ends it would make loved.

We have said enough to justify the effort of analysis to which we wish to devote ourselves. It is not a matter of indifference to know in what cases categories of ends and of means are applicable to the values whose reality we have established.

Are there, then, among these values, certain ones to which should be reserved the character of ends, which should be ends in themselves, while the others would be only means?

A philosophic tradition which goes back to Kant, would tend to justify this distinction. Virtue would be an end-in-itself. To art would appertain "purposiveness without purpose"; which means, to borrow the formulas of Hamelin, that an esthetic activity is less concerned with the results to be attained than with the processes to be put into action. Anxiety for results obtained with the minimum of expense characterizes technical and economic activity. The values in this domain would be, then, what Urban calls "instrumental": compared to others they would constitute only systems of means.

We believe this distinction open to criticism. In the psycho-social reality things are less clear-cut. Moral values, for example, are not always esteemed for themselves. In an act of virtue, we appreciate not only the personal effort it has cost but also the various social benefits it is capable of procuring. Has not charity been depreciated by reason of the waste it involves or the degradations it entails when exercised haphazardly? At the same time, to make solidarity appear desirable, the hope is held out that by its agency will be safeguarded not only justice but national prosperity. Moreover, is virtue not often treated as an assurance of personal salvation where it is not appreciated as an instrument of collective vitality? In the one case as in the other, moral values are reduced to the status of means.

Inversely, is it rare for economic values to be promoted to the rank of ends? A value presents itself as an end when, demanding no more of it, we limit our ambition to possessing it. The counsel attributed to Guizot, "Enrich yourselves," is doubtless not presented as an imperative category: the perspective of the varied satisfactions wealth can procure awakens, of itself, all sorts of emotions ready to transform themselves into propulsions. But the very variety of the possible satisfactions throws this quasi-universal means into strong relief. In a certain state of civilization, it tends to become the key which opens almost all doors. This is why one desires wealth without needing to conjure up the various purchases it would permit. It is desired in the abstract as though it were an end in itself. In his *Philosophie des Geldes,* G. Simmel has ingeniously analyzed the privileged situation which money holds in virtue of the very indeterminateness of the satisfactions it can procure and the possibility of choosing between them. In a sense, money is the unrivaled tool, the pure means; and this is precisely why it passes to the foreground of desire and, concentrating on itself the multitude of efforts, sets itself up as a dominating end.

Moreover, this sort of promotion of economic values is only a particular case of a more general

law, the law of *transfer* which governs the whole life of our feelings.

It is well known that a thing, absolutely insignificant in itself, may become by accident, by reason of the emotions with which it has happened to be mixed, a veritable fetish. Spencer remarks that there are people for whom the cry of the raven, often heard in the splendor of twilight, has a quite special charm. The least object used by a great man remains somehow impregnated with his prestige. *A fortiori,* a cause whose representation is normally bound up with its anticipated effects retains, in itself, something of the attraction originally attached to these effects. This is why the instrument becomes, in itself, a cause of satisfactions. Ownership is enjoyed apart from use.

It must not be believed that this sort of carrying-over is the monopoly of the miser who enjoys his gold while denying himself all the enjoyments whose evoked possibilities make gold desirable. In varying degrees, similar displacements of interest are the rule in the whole social life. Such and such a form of art could not have been produced anywhere but in the shade of temples. It served religious ends. The amateur of to-day forgets these; he takes pleasure in the art for the art's sake. In the same way, certain natures prize power for itself, quite apart from the various "realizations" it permits.

Others uphold liberty for its own sake without fixing their attention on the various forms of progress, moral or economic, which liberty favors. It is, henceforth, in their eyes, an end-value.

Could not the superior dignity with which thought, itself, is invested be explained through transfers of this order? A being who is born only incompletely adapted to the universe, and who, to survive therein, cannot depend upon his instincts alone—this is precisely the fate of man—has need, at every instant, of foreseeing, of distinguishing between variable and constant phenomena in order that he may direct his activities accordingly. Various as they may be, and by very reason of their diversity, the problems his life sets him demand that he put his intelligence to work. It is the faculty called upon at every instant to function in response to the exigencies of new situations. We have here, then, a universal organ which incessant exercise develops, complicates, refines, and the cultivation of which must some day come, through force of circumstances, to be regarded as desirable in itself.

Certain philosophers will, doubtless, feel themselves called upon to protest against this evolutionist explanation. Striving to tear aside the veil of appearances, refusing to let themselves be influenced by the time element, they will protest that that which is first in chronological order is not necessarily

first in ontological order. If being is so dependent upon mind, this latter could not be a resultant of history. But even those who feel themselves capable of seizing, by an act of intuition, the eternal reality of mind, will have to admit that, for it to take rank among recognized social values, the fact of its having undergone its trials and developed its powers in responding to the demands of life is not without importance. How does so frail a plant succeed in forcing its way through the brambles of instincts and becoming the great tree with wide spreading branches wherein ideas take up their abode? It is a question of this nature that Auguste Comte poses in meditating on the destinies of human reason, so humble in its beginnings, so powerful after centuries. The psychological processes which transform a universal means into a superior end are certainly not irrelevant to this ascension of the mind.

The unrolling of history, moreover, lets us perceive other transformations than these. Not only is it verifiable that means are transformed into ends, but one sees the same means serve several ends successively. This is what Wundt has proposed calling *heterogony*.

Here, the instrument keeps its rank as instrument, but, according to the times, one effect or

another is drawn from it. The repasts which accompany funeral rites are nowadays little more than acts of civility: the family of the dead consider it due to their self-respect to offer their neighbors this sort of compensation for the trouble to which they have put themselves. But we know that, originally, these repasts were a veritable communion in which the dead man, himself, was supposed to participate. The tip, primitively the stirrup-cup of the guest, is also, in its original purpose, a religious act. This purpose is replaced, to-day, by the desire of keeping one's rank, of displaying generosity, of avoiding some affront.

And how many ritual prescriptions are conserved for some hygienic reason when the belief which justified them has disappeared! Even in the religious world substitutions are not rare. Cults live longer than beliefs and adapt themselves to new ends. Certain symbols which have served to honor one god pass into the service of another. The Horus of the Egyptians—the Rising Sun represented by a new-born infant who sucks his finger—becomes the Harpocrates of the Greeks, the god of silence. Mercury Criophorus is transformed into the Good Shepherd. From the solar wheel of the Aborigines of India, the Buddhists make the Wheel of the Law. If we bring our attention back from these far-off times to the contemporary epoch, and

from religion to pedagogy, we will see the defenders of Greco-Latin education expecting from it benefits altogether different from those meditated by its founders. Thus humanity, ever economical, spends its time pouring new wine into old bottles.

These are spontaneous tactics which bring in their wake more than one important consequence, permitting, in particular, what might be called the accommodation of remainders in history. An institution, a rite, a method may have lost its first object. If one lends it a new object, it has at once a reason for enduring. And, certainly, there are things in the social organization which seem to continue of themselves through a sort of acquired momentum. The force of tradition as such is one of the characteristics of human society. "That is done because it has always been done." Thus survivals might be explained. The belief which justified a certain ceremony has disappeared; the ceremony subsists. Our societies, according to Tylor, are still strewn with these landmarks. Many of the obligations with which we are confronted are to be explained by the ideas of former times. It would be well to add that often a new idea comes to replace the old as justifying principle. Did not Tylor, himself, recognize this when he spoke of "partial survivals"? He designated thus "all those cases which offer us customs well enough composed for us to be able to

grasp their origins, although, in taking a new form, these same things have become so well adapted to their new setting that they retain their place by their own proper value." Heterogony of ends is one of the processes which render this adaptation possible.

Moreover, it may happen that, in the eyes of certain servitors of the institution or certain conservers of the rite, the old end retains its value, while for others the new end takes first place. Then we see, as it were, different centuries coexisting in the same grouping. Certain minds have remained at a phase of civilization long passed by the others. Their watches do not mark the same hour. They continue, however, those who are in advance and those who are late, to be capable of combining to maintain a custom, perpetuate an anniversary or safeguard a system of ideas. To the ones, the values protected in common are ends in themselves, to the others they are only means. Some conserve their original ends which were religious; others assign them political ends more recently conceived; still others, esthetic ends, perhaps born yesterday. Thus, such a procession finds, in addition to the faithful who follow it, troops of very heterodox defenders. One knows very well that it is not only the believers who weep over "the pitiful condition of the churches in France." Very modern sentiments respond, here,

to sentiments very ancient. All this goes to show that the various reasons for maintaining an institution, reasons which we see arising one after another, are far from inevitably expelling each other. New and old, those which date from yesterday and those which arose twenty centuries ago, they tolerate each other. More than that, they aid each other. And individuals are drawn into their motley round. Convergences of action triumph over the resistance offered by personal thoughts.

Thus, we find ourselves in the presence of that phenomenon which is, perhaps, the most important for our purpose, the coexistence of diverse ends in the same value. It is not only that several ends, each in its turn, can make use of the same means: they can utilize it simultaneously. It often happens that the same word, far from letting itself be monopolized by one idea, does duty for several. It accumulates meanings. *Key* is to-day a musical as well as a mechanical term. The mathematician and the farmer speak of *roots*. *Base* is used in chemistry, in architecture, in military science.

This multiplicity of meanings carried by the same word is what linguists call *"polysemy."* By analogy, we propose to call the multiplicity of ends attained by the same means *"polytelism."* Here, we believe, is a phenomenon whose consequences deserve to be

pointed out by the sociologists. Not that it constitutes one of those central facts on which one can hope to build up a general theory of social continuity and solidarity. But because the conjunction of ends, while it may appear quite secondary or accessory, nevertheless contributes its share toward explaining how this same continuity and solidarity persist through so many forms of progress which menace them. Polytelism is at least a happy accident for civilized societies.

It is easy to divine in what sense we call it an accident. That the same means should work toward several ends is not necessary. The relation of means to end is but the practical side of the relation of cause to effect. We think of a cause as producing only one effect and discharging its whole energy in a clearly determined direction. But this ideal case is far from being the normal case. Dispersion of energy is the rule. The movement unloosed rouses more than one property in things, puts several laws in action, for the simple reason that all things hang together and that nature does not submit without resistance to our desire for abstraction.

Industry is well acquainted with these resistances and, for reasons of economy, applies itself to surmounting them. Its ideal is to obtain sources of energy which let themselves be canalized integrally

in one category of effects. A liberation of heat accompanies the production of light. This is almost always a dead loss. If some one should succeed in dissociating these two phenomena, it would be a great step in advance. To multiply improvements of this sort by increasing dissociations is assuredly one of the tasks of modern industry. In this direction, it works to realize, for practical advancement, the possibilities inherent in the abstractions of science. It creates tools adapted for a single task. It seeks out means suited to a single end.

We would not go so far as to say that polytelism is alien to perfected industry. Far from it. Every great factory has, to-day, its by-products. The art of disposing of the waste materials of the principal industrial operation is becoming an integrant part of the profession of the commercial engineer. Thus the supererogatory effect takes the rank of accessory end. Let us add that the technician must almost always, as a general rule, concern himself with various needs which he wishes to satisfy at the same time, utilizing in every way the mixed properties of the material he employs. Only think of the diversity of ends, hygienic, esthetic, economic, the architect must take into account. He is glad, indeed, to utilize, to the best of his ability, the multiplicity of effects.

Can not society, in its turn, derive advantage

from this same multiplicity? It is not only in the order of material things that the same cause is to be seen setting free several series of divergent effects. The administration of justice has its by-products as well as a factory. Clothes serve various purposes, to warm, to conceal, to adorn, to distinguish. Religion and hygiene, family life and civic life have each their reason for keeping up the weekly day of rest. From an institution, a custom, a precept, a judgment of value, varied influences can radiate; several tendencies can derive satisfaction from them at the same time.

Are we to assume that such frequent coincidences have no social importance? Is there not, rather, reason to believe that they aid groups to resist the forces of dispersion? And this is to say that, side by side with the process we have described, the *differentiation of values,* place should be made for a process of opposite significance but of no less importance, the *conjunction of values.*

CHAPTER VI

ECONOMIC VALUES AND IDEAL VALUES

We have seen that judgments of value—whether of the esthetic, religious, economic or moral order —express, not the relations of things among themselves, but the relations of things to human tendencies. To classify, coördinate and explain these judgments should be one of the principal objects of sociology. It would thus introduce a principle of unity into the changing infinite of desires. It would throw new light on old problems.

But, as soon as we try to make use of this directing and unifying idea, we run up against difficulties. The world of values has two poles. The feeling of value has two origins. Valor, or value, is the virtue of the man capable of every sacrifice. And, in another sense, value is the price of things on the market. Moral idealism, on the one hand, economic realism, on the other. At first glance, the distance appears hard to overcome.

Are values of the economic order, then, only a variety which should take its place, in the world of values, beside those which govern art and moral-

ity, law and religion? Or do they, indeed, constitute a world apart from these latter and quite without a common standard? Many, both in the camp of the moralists and in that of the economists, seem to lean toward this latter alternative.

It has already been remarked that such a man as Kant refuses to admit that the expression, value, can properly be applied to economic things as well as to moral acts. He holds that, while economic things can have a price, they cannot have a value in themselves, an interior value, an intrinsic value.

Höffding shares Kant's feeling when, speaking of religion, he says that its chief function is to be guardian of values; and by these latter he does not mean the material interests, dear to political economy, but rather all that surpasses them.

If the moralists seem agreed to widen the gulf between economic values and moral values, the economists, for their part, are not anxious to have the terms brought too close together. This can be accounted for by the idea which the greater number of them have of their science. Economics which was the first, and, doubtless, in their eyes, is the only solidly constituted social science, they regard as a sort of physics or, at the very least, a privileged mathematics. This is explained by the nature of the values with which it deals. Economists are quite willing to admit that ideal values, those with which

the history of religions, the science of ethics or esthetics are concerned, are matters of opinion; on them the reflection of dominant ideas can, easily enough, be remarked. In the world of economic values it is, in their opinion, otherwise. These latter have something of the resistant, of the solid, which renders them analogous to material facts: they are not submitted to the fluctuations of opinion but to immutable laws similar to the law of gravitation. They are rocks, it seems, not clouds.

This is probably the reason why, while the sociologists attempt to find relations and introduce a principle of unity in the world of values, a great many economists, still more energetically than the moralists, entrench themselves in their positions and claim a jealous autonomy for their science.

At the bottom of the resistance sociologists encounter along this line of effort, two main ideas can be recognized. The first is that the realm of opinion is that of unordered fancy. The second might be expressed thus, "There is no science but of the material."

It was long believed that for political economy to conserve its character of science, it must be kept attached to things. Its proper object, wealth, was held to be always reducible to material realities, wheat or coal, wood or iron. This explains the high

place accorded, in the first economic theories, to the earth, reservoir of all materials, and source, seemingly, of all values. It was necessary to struggle—this has been one of the merits of the French school, of J. B. Say, in particular,—to force the recognition that services, also, those of the doctor, the teacher, the lawyer, are creators of wealth. The "immaterial products" must figure beside the others in the balance sheet of nations. The capacities of individuals are not less productive than the properties of the earth. Attention has thus been led from things back to man, and from the earth to labor.

Now as to man, himself; from what viewpoint must a scientific economy consider him? In place of the material economics would like to hold to the mathematical. That, in man, which interests it is the producer of energy capable of being transformed into exchangeable objects. And it endeavors to reduce the value of the objects to the number of hours of work furnished by the worker. In formulating this theory, Karl Marx continues Ricardo. He believes that he is offering value the most objective of bases when he shows in it the product of a quantity—the work quantity—measurable in time.

That this theory—favorable to the socialist propaganda—is far from tallying with economic facts no longer needs demonstration. Karl Marx, himself, recognized this implicitly in the last volume of

Capital. If we would measure the real value of products, we must not disregard the demand. All the work in the world may be incorporated in an object, but if men do not desire it, its depreciation is without remedy as without limit. Value is not alone, nor especially, the function of work: it is the function of desire. And with desire, all sorts of variables are going to come in to make political economy lose its precision of quasi-material science.

One hope remains to those who wish it to retain its privilege in the world of social sciences. They will take demand into account, but only in its relation to supply. And thus, making the establishment of prices their central problem, they will explain it by a relation between forces of opposed directions, comparable, according to them, to mechanical forces. Should the number of buyers increase, the value of the product increases. But if it is the number of sellers that increases, this value diminishes. It is possible, then, to arrive at formulas such as this, "The value of a product is in direct proportion to the number of buyers and in inverse proportion to the number of sellers." The personal interest which each and every one pursues is the sole motive political economy is willing to recognize. To establish such laws it is enough to suppose that each individual present in the market is trying to realize the maximum of profit with the minimum of ex-

pense, allowing no motive other than personal and material interest. Looked at in this way, men are, indeed, comparable to forces with parallel or opposed directions. And political economy is able to retain the character of a sort of superior mechanics which establishes an eternal statics independent of the movement of opinion.

What is this pretension worth? In what measure does it agree with what sociology can teach us in regard to the relations of the individual to society and of material interest to collective representations?

The law of supply and demand is presented to us as a sort of natural law, universal and permanent, analogous to that which governs the equilibrium of liquids. Note, in the first place, that this law is far from verifying itself in any and every medium: for it to function presupposes very definite conditions. This is doubtless true of every scientific law, since every scientific law involves abstraction. Even the laws of the equilibrium of liquids can be verified only under certain conditions of temperature. And how much more complex are those which are necessary to the establishing of the equilibria conceived by the economist! In the book wherein he opposes, to the deductive method, the *empirical method in economic science,* F. Simiand notes this with admirable precision: "The theory of exchange or of the market

contains, in itself, various social implications. It is so little independent of social conditions that, quite to the contrary, it implies a social state so advanced and of so special a nature that, even in our contemporary societies, where economic evolution has produced centers the most developed and the most specialized in this sense, it has not yet found itself completely realized. Not only does this theory imply a preliminary appropriation, a property susceptible to alienation at the will of the owner, the institution of contract by mutual agreement, especially the contract of exchange and sale, but also,—and this, I believe, has been less remarked—this theory implies, if it is to succeed in establishing anything, a certain economic condition of the exchangers, or at least of one among them, very particular or very dependent on a certain social state. Does it not necessarily imply that two traders meet and make a bargain (otherwise it would lead to nothing)? But this is an entirely gratuitous and illegitimate hypothesis, if it is not assumed that one, at least, of the traders is, for one reason or another, bent on closing; and this reason can only spring, for him, from a certain economic condition, dependent on a definite social state, and, still more closely, on a certain state of distribution."

Are these institutions and the institutions which make them possible to be found in all times and in

all countries? Far from it. Perhaps the conception of those free markets, dear to classical economy, with their competitors and their traders animated by the sole idea of realizing the maximum of personal profit with the minimum of expense, is an idea which could arise nowhere but in the modern Occident. A Hindu economist, Ranade, observes that almost none of the postulates of our political economy seem to fit in with the economic life of his country. The interior solidarity of each caste, as well as the repulsions which separate them from each other, would be sufficient to prevent the price level from being established by the sole intermediary of free competition and free agreements between individuals. Far from soaring above institutions, the law of supply and demand presupposes, to produce its rational effects, the existence of a certain number of quite special institutions.

Economic matters always presuppose a juridical form. The force which makes for production and exchange is always checked and canalized like electric power. Sellers and buyers are constrained to submit to certain rules. The economic act must come, first and foremost, under the category of lawful acts. Otherwise, we would have to grant, as a philosopher with a strong sense of humor, Sageret, puts it, that the economic act *par excellence* is theft. The *homo œconomicus* can act normally only as *homo juridicus*. The incentives

which push toward the maximum of profit for the minimum of expense are, themselves, as it were, deviated by a prism which is the judicial system. And if it is true that this system is the crystallization of the views of a society, if law translates one part of the tendencies of the collective ideal, we can see how, in this way already, society exerts pressure upon the individual and orientates the idea he forms of values, however free we may suppose the market itself.

The two ideas by which economic motives are defined are, moreover, singularly narrow; material interest and personal interest. In reality, higher and broader interests enter into the reckoning. The great merit of the *National Œkonomie,* reacting against the cosmopolitanism at the same time as against the individualism of the classical doctrine, is to have brought to light the existence of clearly collective interests, and especially the existence of national interests. It is, certainly, easier to feel them than to define them with any degree of precision. Collective beings, also, have need of acquiring and conserving that which is necessary to their existence. But what makes for the existence of a collective being as such? A certain number of permanent relations among individuals, each of whom is but a transient, define its structure. The functions which maintain these relations are, then, vital functions.

And whoever performs them plays a particularly important rôle. This is why De Bonald classed, in the first rank in the social hierarchy, the professions which contribute, more or less intimately, to the organization of the state. The guardians of order were, in his eyes, with regard to collective interests, the real producers; production properly so-called remaining a domestic affair.

Without doubt this conception is far too narrow; the conditions of collective life are not only formal, but substantial. Safeguarding the material interests of the group, made up of individuals, necessitates special measures. Cournot brought this out long ago. A forest is not exploited in the same fashion for private as for collective interests. Every public service with a material basis constitutes a center of economic organization with its own special needs. A city is interested in having pure water in sufficient quantity, and the long operations it undertakes in consequence are different from those which personal interest would suggest. With even greater reason, must a nation assure itself of that which is necessary to its existence as a nation. The interdependence of modern nations, which industry, with its indefatigable shuttle, renders unceasingly, day by day, more close, does not preclude the legitimacy, the necessity even, of the national point of view in matters of production and exchange. In vain, the

writers of *Clarté* protest that there are only two sorts of interests; the individual and the human. No affirmation could be more contrary to the facts, in the reality of to-day. An economist had the fancy to launch the whimsical query, "At the epoch in which we live, can a nation which has no coal at its disposal continue to be a nation?" He indicates, thus, that a minimum of economic independence is a condition of political independence, itself.

A nation, also, then, possesses material interests; and individual interest is not the only thing to be considered in the attempt to understand the movement of economic values. But, whether an individual or a nation is in question, the category of material interests is too narrow to cover all the facts.

Long ago the attempt was made to correct or complete the psychology of the *homo œconomicus.* The analysis to which A. Wagner devotes himself, in his *Lehrbuch der politischen Ökonomie,* is often cited. He points out that other factors than the pursuit of purely economic advantage must be taken into account, such recompenses as honor, activity loved for itself, in short, moral satisfactions. If an ampler and more profound criticism of classic mercantilism is desired, one should re-read Fourier. The complex organization of his phalanstery is but the exterior translation of the diversity of motives he discerns in souls. The inventor of those human

types the *cabaliste*, the *composite*, the *papillonne* is wise enough to provide an outlet for the desire for struggle as for that of grouping together, for the pleasure of specializing as for that of varying occupations.* To the dry and narrow classic theory, he thus opposes the richest inventory that has ever been made of human potentialities.

We would profit by calling to mind this richness, in order to understand the influence society can exercise on the individual. Man is far from being, in all things and always, a materialistic calculator. In the interests which actuate him, numerous ideals are incorporated; this explains his susceptibility to all sorts of attractions or pressures. Attractions or pressures, moreover, which vary with societies, and which, in consequence, may translate their characteristic aspirations. On this point, Fourier's thought needs to be completed. The portraits he offers us are always of human nature in general. He presents the motives he analyzes as of all times and all countries. It remains to be shown how different social surroundings act on these motives, repressing certain ones, stimulating others. One of the services sociology has rendered is to have brought these relations to light.

* *Translator's note:*—In Fourier's language, *Composite* means blind impetuosity, enthusiasm which excludes reason: *Papillonne,* love of change and inconstancy; and *Cabaliste,* the party spirit, the spirit of intrigue.

In truth, it has been chiefly in primitive societies that these influences have, up to the present, been studied; and it is their negative aspect which first attracted attention. Long ago, Lubbock observed that, contrary to the ideas dear to the eighteenth century, the savage is loaded with chains. He lives, tormented by scruples, in a world teeming with prohibitions. Taboos forbid him to touch, as being sacred for him, numerous animals, objects, tools. Many fetters are put upon desire, many obstacles raised in the path of economic activity by these beliefs wherein collective representations take an especially imperious form. They prevent members of the group from consuming what they desire or producing as they wish.

It is necessary, however, to guard against believing that religion is only a paralyzing power for economic life. Its protection has been beneficent to more than one precious invention. Does not Frazer accord to totemism—which forbids killing the animal-ancestor except on ceremonial days—the origin of the domestication of animals, which has given man so many useful companions? In a more general fashion, rites give rise to and conserve more than one technique. The ideas men make for themselves of a sacred world do not, then, render them the single service of depositing in their souls common scruples, primordial elements of morality. Re-

ligious values are also creators of economic values.

Moreover, should the hold of these beliefs decline in force and extent, as happens in many civilizations, this does not signify that the human soul is going to find itself invaded by preoccupation with material interests alone. Society has more than one way of acting upon it. When beliefs are set aside, custom remains, for a long time, tyrannical. Without bringing into play the fear of the gods, it lays under an interdict many ways of consuming and even of producing. And when the influence of fashion comes in to limit that of custom and when, as Tarde indicates, the prestige of the ancestors is opposed by the prestige of the stranger, is the individual more abandoned to his own calculations? Desire to resemble others and desire to distinguish oneself; here are two forces, opposite in direction, which create and destroy values without number. When the barriers between classes have begun to weaken, the desire of the inferiors is to lessen social distances, and that of the superiors is to maintain them. It suffices, then, for a mode to be adopted among the lower classes for it to be rejected among the higher. From this arises the perpetual movement of values which corresponds, not to the material interests of individuals, but to class feelings.

It often happens, even in societies of a democratic type, that each class conserves its own

proper ideas on the hierarchy of needs and, in consequence, on that of values. It has been possible to show that the kinds of "economies" vary according to whether the rich class, the middle class, clerks or laborers are in question. The latter, for example, would, according to Halbwachs, be led, by reason of the habits inculcated in them by their rôle in production, to accord less to lodging-expense and more to food-expense, even when their wages leave them some latitude.

One thing, in any case, is certain, the *standard of living* is preëminently a matter of opinion.

Physiologists may establish scientifically what is necessary to sustain life. It is not on their calculations that, in the social debate, the claims of the one side or the concessions of the other are founded. The disinherited claim not only the vital minimum, but that which they, more and more frequently, call a *decent minimum*. The expression is characteristic; it brings out the fact that it is less a matter of natural than of rational exigencies; the rational being, here, that which the collective conscience of a country and a time, taken as witness, considers just and right. Australia has instituted commissions which fix the living wage. And they do not determine it solely as a function of "material" needs. They set aside a portion not only for food, lodging and clothing, but for journeys, amusements, medi-

cal attention, contributions to churches. Such estimates assume that the agreement is based on a certain number of judgments of value which have nothing of the specifically economic, which, however, exercise a capital influence on the modes and the rate of consumption, on the expenses of production, on the conditions of trade.

This discussion may be summed up in several main theses.

In the determination of values, services enter into the computation beside possessions; the efforts of men beside the properties of things. It is not enough, moreover, in measuring values, to reckon up the work which is incorporated therein. Neither is it enough to present them as resulting from a relation between two quasi-mechanical forces, supply and demand. In order to function, the law of supply and demand, itself, presupposes a certain state of law which marks the limits set by the moral ideal to economic appetites. There are other needs than the material, other interests than the individual. The collectivity, by various systems of attraction and pressure, orientates the desires of individuals, in directions unlooked for by the economists.

In this sense, it is possible to maintain that economic values, themselves, are matters of opinion; it being understood that the opinion of which we speak is by no means an unstable thing or an arbi-

trary fancy. It is the group of ideas and feelings which, in a certain country and time, impose themselves on the collective consciousness and are expressed by imperative judgments of value, reflecting ideals which are in harmony with the structure of society. Values, thus understood, are the essential object of sociology.

Does this mean that it would be advisable to reabsorb political economy in sociology, as Auguste Comte wished, and leave purely economic theories no further rôle to play?

It is true that these theories rest on abstractions. But these abstractions are not without value to science. And, moreover, they correspond, in social evolution, with a larger and larger part of reality. This is what remains for us to establish.

The *homo œconomicus* is only a simplifying concept. In things as they are, under the pressure of the social atmosphere, all sorts of ends cross the purely economic end. This is why neither individual interest nor material interest is the unique measure of values. The sociologists are not in the wrong in insisting on this corrective. But are not the economists in the right in insisting that the complexity of the facts in no way prevents the seeker from placing himself at a particular "viewpoint" in order to separate out laws?

Are we not accustomed, in the physical sciences, to disregard physical properties in order to study geometric forms, or chemical properties in order to determine physical laws?

To give economic categories their full universality, it would be expedient to define them more by the form than the matter. Economic ends and ideal ends are not to be separated like so many apples which one is to put into two baskets. Political economy studies, above all, ways of acting which can be applied to objects in such a way as to be profitable to very different subjects. It has been proposed to give the name of caritative system to the ensemble of philanthropic institutions. These have for their goal not the making of profit but the relieving of misery. But an establishment dedicated to the relief of misery can attain its end at greater or less expense. One hospital is ruined by waste: another obtains the maximum return from its activities. Have not these preoccupations their place in the world of art, itself? There is, for the sculptor, an "economical" method, not only of utilizing materials, but of dividing the tasks among his workmen. Even in the artist's studio, temple of the esthetic, the problem of good management arises.

The profit of good management may go either to an individual or to a collectivity, a society of share-

holders, a syndicate, a nation. There are economic personalities very diverse in extent, in complexity, in attributes. They all place themselves at the economic point of view when they seek, whatever their ultimate goals may be, to obtain these goals by the most direct method, with the minimum expense.

If such is, indeed, the point of view proper to the economist, it is easy to understand how he comes, almost inevitably, to mix functions and appear, at the same time, a giver of advice and a builder of laws. Simiand points out the anomaly. One does not ordinarily see sciences leap thus from explanations to prescriptions, from the positive to the normative. But the very abstraction the economist employs suggests this temptation. He finds that economic persons, individual or collective, normally seek to attain their ends by the most direct means so as to draw the maximum return from the activities they put into play. Now this desire does not appear to him to be always conscious of itself or sure of its means. Being better informed as to the conditions of success, he wants to set these efforts right, to put producers, consumers, traders back in the right path, to say to them, "If you really want to act as 'economic men,' here is the way to obtain the maximum of profit with the minimum of expense, here are the conditions which determine the

maximum difference between the satisfaction of needs by the consumption of goods and the work necessary to the production of these goods."

It will be said that these are entirely relative concepts: they have no value, they do not even have meaning except in a world where the pursuit of profit through the maximum yield is methodically organized. This is why F. Rauh was able to write, "The *homo œconomicus* does not belong to psychology. He is a social and historic type, that of the capitalists of modern times, in a society founded on exchange, currency, credit."

The observation, of itself, invites caution. If one wishes to give a formal definition of economic activity,—as Durkheim, insisting less on the content than on the imperative character of the collective representations which form the nucleii of dogmas, has given a formal definition of the religious life—one must admit that economic categories extend beyond the system of capitalistic institutions.

Indeed, it could even be maintained that they extend beyond material life itself. Are not expressions such as "economical demonstration" frequently employed in geometry? Thus are characterized those demonstrations which, to arrive at their end, employ the fewest hypotheses, contrive the least construction, and which, consequently, burden the mind but little, demand of it the minimum of effort

and leave it the maximum of freedom. The principle of economy has then, as Mach said, its rôle to play in the organization of intellectual efforts and the building up of scientific theories; and it appears, here, that the economic, taken in a large sense, is akin to the rational.

Let us descend from the skies to earth, return from the intellectual to the material life; we must admit that the economic motive finds room to function outside the complex system constituted by the organization of markets. Could we not, if necessary, conceive it as functioning apart from all social life? It is quite clear that the solitary Robinson Crusoe, merely in arranging, in his shelter, the commodities, foodstuffs and tools at his disposal, could employ or not employ an economical method. Should he put the things he needed oftenest in the least accessible places, he would make unnecessary work for himself, he would increase what we may, if we wish, call his costs of production. Primitive tribes, surcharged, as we have seen them, with inhibitory beliefs, or yielding to the instincts of heedlessness, would take a very long time in arriving at the idea of what is necessary to increase the yield and diminish the effort. It is probable, however, that they would not remain, on this point, absolutely blind to the results of all the experience gained in everyday life. The action of the potter

or the blacksmith, who change hands to prolong their effort, that of the woman who gathers up the remains of the meal to use on the morrow, is already an economic act.

In spite of all these concessions, there is still a great deal of truth in the thesis which declares that there is a close connection between the principles of the *homo æconomicus* and the institutions of modern Occidental societies. In this especially favorable medium, prepared by all the transformations the growing power of industry and commerce imposes on minds as well as on things, the essentially economic motives are laid bare. The complex organization of exchange, the extension of credit, and production with a view to indefinite business bring to the foreground of collective attention the notion of profit and expense. Thenceforth, a world of economic values is constituted apart, served by a whole ensemble of special organs. Within the network of political systems and juridical rules, modified by them, certainly, but also modifying them, an economic system is developed which ever increasingly takes for its goal the maximum yield from human activities. Criteria come into play which are very different from those made use of by art, morality and religion. The breach widens between ideal values and economic values. This explains why the moralists hesitate to admit into the same classifica-

tion of values as their illusive norms, the sort of mechanics dear to economists. The quarrel between economists and moralists brings our attention back to one of the tendencies of social evolution already met with in our analysis, the tendency to dissociation of values.

Values become dissociated. Men in primitive societies seem little capable of placing themselves, in order to judge things and people, at different points of view, esthetic, moral, religious or economic. This capacity increases with civilization whose very complications render distinctions necessary. Little by little, each world of values conquers its autonomy. Art, morality, technics liberate themselves, each in its own fashion.

This is far from signifying that all relations between these various systems of values are broken off. He who serves one master sometimes prides himself on serving others by supererogation. In this field, also, there are coincidences and "by-products." It sometimes happens, for example, that religion and art or art and morality join forces. In short, a tendency to conjunction works side by side with the tendency to dissociation, in the world of values. Now the relations which are brought about between economic and ideal values give an excellent idea of the forms that tendency to conjunction may take.

We said that the system of institutions and ideas, constituted to serve purely economic motives, evolves toward autonomy. But the apologists of this system have not been content with praising it for pushing humanity toward the maximum yield. It was, for a long time, an article of faith that the desires of political economy harmonized spontaneously with those of morality. Both teach the fullest community of interests. What is property if not the reward for work? And what is trade if not a double benefit, each of the traders being interested in giving that of which the other has need? Theses such as these, so often revived by Bastiat and his disciples, bore witness to the desire to prove that economic values are, after all, the best servants of ideal values.

It is remarkable that such "conjunctions" are postulated, not only by liberal economists, but by those who are the veritable ancestors of socialism, the Saint-Simonians. Growing lyrical over industrialism, they call upon us to admire, as generator of all other sorts of progress, the progress accomplished in the art of exploiting the globe. They believe industry capable, not only of multiplying material values, but of creating new moral values in giving first place to the producers. They count on the organization of production for the regeneration of humanity.

Only, it remains necessary for production to be really "organized." If its direction is left to the initiative of individuals seeking, at random, their greatest personal profit, there are too many chances that industry will not bring to the greatest number the benefits expected of it.

It is on this point that we most clearly see social economy separating itself from political economy properly so called. Preoccupied with the effects which the institutions and customs which serve the multiplication of wealth have on men, especially on workmen, social economy points out that the economic mechanism of the modern world excludes an immense crowd of human beings from the circle of values which make human life worth while. Culture is, for so many, a white summit forever inaccessible, and liberty an empty word. Since Sismondi and the various groups of French socialists antedating 1848, the demonstration has been revived a hundred times. Does it not flow, even to-day, from the pen of a Walter Rathenau? They are few now—and they preach in the desert—who think it necessary to *let alone,* to maintain a policy of *hands off* toward economic laws, "as good as they are inevitable" in order that everything may be for the best in the richest and most just of worlds. On the contrary, the opinion prevails that it is necessary systematically to defend ideal values against the encroachment of

economic values. A great effort of rational organization remains to be made, in order that human labor, as is said in the Peace Treaty, may no longer be treated as a merchandise.

Hector Denis defined the evolution which pushes on to these conclusions by saying that political economy is, more and more, subordinated to morality. Taken literally, the formula would be inexact. It would tend to make it appear as though the subordination in question were a quite recent fact. It would make us forget the weight with which ideal values have pressed on economic values for centuries; and, in particular, the various influences, sometimes helpful, often fettering, that religious beliefs, generators of moral scruples, have exercised on production or exchange.

The truth is that this system, profiting by the movement of values toward progressive differentiation, has labored to break its fetters. Numerous institutions have been modified or created entire to forward the maximum return from human effort applied to matter. And for a moment it was possible to believe that this liberation was sufficient to put the values characteristic of civilization within reach of all. That is, people believed in a spontaneous conjunction of the different sorts of values.

Experience seems to have proved that things do not arrive at harmony by themselves, and that it is

necessary to interfere with the economic mechanism in the name of the rights of humanity. We can express this by saying that morality endeavors to react against political economy. But we must be careful not to present this reaction as something new: collective beliefs, under all the forms we have brought to mind, have long acted on economic motives. This action has never ceased. Is it to be believed that, even under the most liberal régime that could be imagined, "pure" political economy could ever govern the whole social reality? Other "opinions" than those which reigned at the time when *laisser-faire* passed for the remedy for all ills, have assumed, under the double action of democratic propaganda and economic experiences, a growing empire. After the general upheaval of the war, these opinions could only rise again more imperious and, as it were, more irritated. This has brought about the tremendous effort of reorganization which humanity has undertaken in so many countries; an effort which is not less tragic and, regarded closely, not less splendid than the battles of yesterday.

CHAPTER VII

RELIGIOUS VALUES AND MORAL VALUES

If we detach morality from religious beliefs do we not deprive it of all sap and soon reduce it to the state of a withered branch?

This question is always raised. Before the war, "in the time when the French didn't love each other"—as one of the men then expending the most talent to irritate them against one another put it—what rigorous campaigns were waged against "laicism!" They are not forgotten. Dissolution of morals, relaxing of discipline, growth of alcoholism and criminality, decadence of the race and diminution of the population, all could be explained, it seemed, the most logically in the world, by a satanic invention, the school "without God," which pretended to teach a morality independent of religious creeds. Some even went so far as to placard on the walls that it was a veritable school of crime. Many of our neighbors—in Spain as well as in Belgium—held the matter amply demonstrated. And we remember that at the second congress of moral education at The Hague, the French university represent-

atives had the greatest difficulty to protect a minimum of autonomy for morality.

Then came the war. And it seemed for a time as though it had drowned this old quarrel. The great "degenerate," pitied or vilified as the victim of republican experiences, France, did not conduct herself so badly under fire. And the pupils of the laic school, the immense majority of her combatants,—whose masters had it at heart to give example after precept—cut a splendid enough figure on the Marne or at Verdun. One could only bend and salute profoundly, confessing that people had at least exaggerated the evil and calumniated "Master Aliboron." * Such repentances counted among the most worth-while gains of the Sacred Union.

But the wind changes: and more than one among our adversaries of yesterday is working to regain discreetly the ground too generously ceded. From various sides, the "sacrificed generation" is made a witness. And it is often affirmed that their true masters might have been a Péguy or a Psichari, loved less for the talent displayed than for the faith refound. Moreover, if those resounding conversions *coram populo,* which are a sort of political as well as literary event, are found lacking, some will

* *Translator's note:*—Master Aliboron is the name given to the ass in one of La Fontaine's fables. It has been taken up as a term of contempt and has acquired the meaning of pedantic imbecile.

be happy to note that, in the anonymous crowd, penitents are not rare. Have not some "new souls" *—souls of instructors—revealed how, by the spectacle of the war, itself, by its sublimities as by its horrors, one may be brought back to the altar's foot? Who knows that these five or six school teachers, come back among the faithful through having been warriors, may not be the first group of a procession which will stretch out indefinitely?

Doubtless our recovered brothers of Alsace and Lorraine will willingly furnish great contingents to this procession. It is well known how difficult it is for them to permit the schoolmaster to begin the class without a prayer. It is remarkable, moreover, that at the recent Congress of Oxford, where the allied philosophers assembled to discuss, along with the problem of nationalities, that of the relation between religion and morality, the majority of the members of the "symposium" appeared to be of the belief that morality could not do without religion.

Do not doubt that such testimonies are going to be, as Brunetière used to say, methodically "utilized." It follows that, after the war as before, if not more than before, the laic school is going to have to justify itself, to defend its principle, to prove that a teaching, neutrəl in religious matters, is not fatally null, nor *a fortiori* generator of crimes. The

* "Ames Nouvelles" is the title of P. Vessière's book.

cannons are silenced; the dialogue is about to recommence. We shall hear them as before, the two chimes so difficult to harmonize.

Would it at least be possible to throw light upon the grounds of the struggle, if not to bring the combatants to terms, by bringing in the results of our investigations on the evolution of values?

Whether morality derives originally from and continues to be essentially dependent on religion is a question to which we ought to be able to respond by the results of observation. There are people who collect and coördinate data of this sort, ethnographers and sociologists. Shall we listen to what they have to say?

But what a cacophony breaks out immediately; and how difficult it appears, at first hearing, to bring into accord so many discordant testimonies!

"All moral commandments," declares Wundt in his *Ethics,* "have originally the character of religious commandments." Caird, for his part, in *The Evolution of Religion*, states that "In the earliest periods religion and morality are necessarily correlative." And Pfleiderer (*Philosophy and Development of Religion*) tells us that "The beginnings of all morality are found in religion." Robertson, Smith and Jevons would doubtless have subscribed to these formulas.

But Westermarck does not fall into line with them. In his remarkably rich book on the *Origin and Development of Moral Ideas,* he points out that the function of guardians of morality was not assigned to the gods until very late, and that, according to numerous travelers, religion, in the tribes they have studied, has nothing to do with the ordering of the relations of men among themselves. Irving King, in the *Development of Religion,* likewise accords to religious beliefs only a secondary rôle in the formation of moral customs.

Goblet d'Alviella, for his part, declares that he "leans toward the original independence of religion and morality properly so-called." Ed. Meyer, in his *Geschichte des Alterthums,* writes, "Law and morality are autonomous powers which have, as well as all material civilization, a principle entirely independent of religion, and can, without it, persist unaltered."

And here, at home, one of those who have contributed to renovate, in their teaching at l'Ecole des Hautes Études, the history of religions, by researches into primitive psychology, Léon Marillier, definitely refuses to bind up morality with religion.

It is true that our sociological school takes an entirely different position. The editor of *l'Année Sociologique,* Durkheim, wrote, in explanation of the large space accorded, in the collection, to the study

of religious phenomena, "It is because they are the germ from which all others, or at least almost all others, are derived. Religion contains in itself, from the beginning, but in a confused state, all the elements which, in dissociating themselves, in combining in a thousand ways with each other, have given birth to the various manifestations of the collective life. It is from myths and legends that science and poetry have arisen; it is from religious ornamentation and the ceremonies of worship that the plastic arts have developed; law and morality are born from ritual practices. It is impossible to understand our representations of the world, our philosophic conceptions in regard to the soul, morality, life, without having knowledge of the religious beliefs which have been their first form. Kinship began by being an essentially religious bond; punishment, contract, gift, homage are transformations of the sacrifice, expiatory, contractual, communional, honorary, etc."

Of all forms of human activity and thought, the one which retains the most profound imprint of religion is assuredly morality. It is, according to Durkheim, impossible to understand anything of the categorical imperative without knowing how those collective representations which are the framework of religion are constituted and how they impose themselves.

To whom shall we give ear? Where some say dependence and derivation, others respond autonomy or even anteriority of morality. How and upon what points can these antithetic opinions be reconciled?

If there are such divergences of opinion among our authors, it is, doubtless, partly because their fields of observation are different. But it is chiefly because they do not make use of the same classifications. Under the two words, religion and morality, they do not place the same ideas. It is not surprising that conclusions should differ when there is no agreement on definitions.

The difficulty, in such matters, is to avoid the personal definition, that which is suited only to the experiences, religious or moral, the author has been able to compass in his own country and in his own time. Provided with outlines so narrow, one naturally risks letting numerous facts escape and disfiguring others. When the question of the bearings of religion is raised among us at the present time, it is most often the case that by religion is meant belief in a unique and personal God whose highest function is to make the ideal he incarnates respected by recompensing those who have obeyed and punishing those who have disobeyed his prescriptions. "Is not such

a belief," it is asked, "the axis, the support of the whole moral life"?

Those who adopt this conclusion are not, ordinarily, anxious to generalize it: they do not willingly extend to religions in general the privilege they claim for the one familiar to them. Are they not most often attached to it because of the support it lends their moral conscience? From this comes the natural tendency to ascribe to the church in which one has settled one's soul a sort of monopoly in moral matters. The Catholic pities or jeers at the Protestant: the reformed religion lacks that principle of order, of unity, of discipline which is so comforting to the conscience. The Protestant jeers at or pities the Catholic: where the Pope reigns there is none of that feeling of autonomy without which moral life is only a vain conformity. However, whether Catholic or Protestant, Christians agree generally in thinking that among the "heathens" religion is rather an agent of demoralization. Does not the tradition of the missionaries converge, on this point, with that of the philosophers of the eighteenth century? These latter, forced, as Voltaire said, to hide their hand and not attack the Christian religion directly, rejoiced in imputing to non-Christian religions all sorts of extravagances, of barbarities, of crimes of high treason against humanity.

To tell the truth, in this very world of religions

where, for so long a time, pretensions to a moral monopoly have run counter to each other, we see unexpected rapprochements occurring under our very eyes. A common enemy has worked this miracle. Before the progress of independent rationalism, believers from all points of the religious horizon are willing to forget all that so gravely separated them yesterday. A Parliament of religions held a session at Chicago, and it claimed for the very different faiths whose followers it brought together—for Buddhism and Islamism as well as for Protestantism and Catholicism—the common privilege of elevating consciences.

Certain beliefs, however, remained shut out from this communion; those, precisely, the study of which would seem able to help in resolving the questions of origin; those of primitive or "non-civilized" peoples. For the great religions which, through faith in a revealer, have sought proselytes beyond the barriers of nations or empires, the name *ethical* was reserved: the others, developed and retained within the compass of the tribe, were called "nature religions." It seemed to be meant by this that primitive beliefs, personifying the forces of nature, to which they attributed the most formidable caprices and which they sometimes honored by the most cruel rites, were little concerned with furnishing a moral orientation to human activity.

This distinction, in its turn, has had to give way before the progress of the science of religions. When this latter has had full play and, leagued with sociology, has gotten rid of the preconceptions suggested by traditional preferences, the necessity of enlarging the concepts to fit the variety of facts has been recognized. Does religion imply only the idea of a divinity, no matter what? Buddhism and Jaïnism, which are religions without gods, are living proofs to the contrary. It is no less to mutilate history to bind up the religious feeling with the feeling of infinity, of mystery, of the supernatural; these are all sentiments which presuppose, in order to go beyond it, a notion of natural determinism which does not crystallize till quite late. There is religion, in reality, wherever a sacred world is clearly distinguished from a profane world; wherever there are rites with the object of regulating communications between these two worlds; wherever myths are grafted on these rites and, participating in their special authority, keep something of their imperative character; in short, wherever a moral community, a Church, is constituted to assure the accomplishment of these practices and respect for these beliefs.

The definitions which Durkheim thus proposes are *formal* definitions which clearly agree as well with the religions called naturist as with the ethical

religions and embrace both Catholicism and totemism. We will, then, be permitted to seek, in the institutions of which this latter is the center, which are to be met with in the greater number of primitive societies, the elementary forms of the religious life and its original relation to the moral life.

No educated person to-day is ignorant of the totem. This Algonquin vocable is being incorporated in every European language. All the world has heard more or less talk of those clans, American or Australian, which have the singular idea of taking, as a rallying emblem, the image of a being, most often an animal, from which their members regard themselves as descended. The eagle and the hare, the kangaroo and the emu, the black-snake and the white cockatoo become, thus, veritable heads of families. Those who belong to a particular family have, over the ancestor-animal, a sort of property right. There are cases, for example, where no outsider may hunt it without their permission. At the same time, they are bound to the species by a whole network of duties. Must they kill one of its members? They begin by humbly begging his pardon. And if the species is eatable, either they abstain from eating it or they eat it only on certain days, after special precautions.

It will be asked what of the religious is to be

seen in all this? Magical practices, every one will admit. Desire to conciliate the good graces of an animal species, perhaps, or to escape some danger through being assimilated with it. It is to this interpretation, so it appears, that the eminent ethnographer, Frazer, holds to-day. But what common measure is there between these infantine assimilations and the great constructions with which the Hindu, Greco-Roman, Jewish or Christian religions have made us familiar?

In any case, let us take up, one by one, the general characteristics we have made use of in defining religion. Are any of them lacking to totemic societies?

Simple as it may seem, the totemic system involves a whole retinue of beliefs and rites to which a sufficiently sympathetic attention would seem never to have been accorded. The Arunta or the Waramunga who call and feel themselves kin to the falcon or the water, doubtless do not represent to themselves any personal and universal god who demands their prayers. But they believe in the existence of vague forces, impersonal and anonymous—what the Sioux call *wakan* and the Melanasians *mana*—forces which, imposing themselves in some fashion on things and beings, lend them movement and life. These forces are arrested, lodged, incarnated in the totem animal. From generation to generation, the totem is sup-

posed to reincarnate itself. Thus it soon comes to be regarded as the ancestor deified, a sort of generating spirit. And the principle which emanates from it to animate bodies, precedes them, survives them, overflows while it lodges in them. Is not this the first sketch of the soul? A sacred world is thus set up over against the profane. And do we not recognize, in the rites which are organized to permit contacts at once dangerous and regenerating between the two worlds—in the famous Australian ceremonies of the *Intichiuma,* for example—the rudiments of those sacrifices, communions and oblations which have such a large part in the most complex religions?

And more, these myths and primitive rites perhaps let one catch a glimpse, through their tangled branches, of the deep source of the religious sentiment. Is it not in society, itself, that we must seek it?

Where shall we find the model of those sacred forces of spiritual nature by which man feels himself surrounded and dominated, if not in those special forces which are freed by the communion of consciousnesses? Is not the power they engender in assembling together and organizing themselves, the type of those powers, at once restrictive and beneficent, imperious and helpful, before which people bow down with mixed feelings of terror and love?

Social life is, *par excellence,* that which, by imposing an ideal on itself, inspires a soul in the individual; is, at the same time, that which has need of being periodically regenerated by the exaltation of assembled individuals. Relate sacrifice to society; at once you understand the double end of the institution which is as necessary to the life of the god as to that of the faithful. The great theme of all myths is the relation of individual forces to collective forces. The ultimate aim of all rites is the moral regeneration of groups.

Note that, in thus explaining religion, Durkheim really believes that he has found its justification. He bases it on social considerations. We would be entirely deceived in thinking that, if he brings together the great proselytic religions and the inferior and elementary religion of the Australians, it is for the malicious pleasure of humiliating, in comparing them with savages, the believers of our own civilization. These tactics have more than once been employed. But Durkheim, for his part, does not lend himself to this play. Nothing is further from him than the Voltairian spirit. And precisely the reproach he has for the theories of the ethnographers or philologists, his predecessors, whether animist or naturist, is that they still reek of the eighteenth century. Tylor derives belief in the soul from the need man feels of explaining his dreams. Max

Müller sees the belief in gods born of those equivocal metaphors of which man is so prodigal when he begins to manipulate the precious and dangerous tool of language. But both explanations, according to Durkheim, tend to depreciate religion; both see therein only hallucinatory images, products of delirious interpretations. How could such illusions have endured and played such a great historic rôle? On the contrary, the endurance is explained, the great rôle of religious beliefs and practices is comprehensible if they are interpreted sociologically, if the special needs to which they respond and the superior reality they translate are called to mind.

Such being the social essence of religion, it would be astonishing if it did not keep up the closest relations with the rules which govern the life of men in society.

We have been very prompt, casting our eyes on the primitive world, to declare immoral or amoral a great many of the practices its religious beliefs demand. Human sacrifices, voluntary mutilations, obscene cults, does not the museum of religions indeed bring together the collection of insanities and barbarities that Voltaire denounced with so much vehemence? Let us be on guard, however, against the danger there may be of judging everything, in moral matters, according to our times.

The crowd of precepts which, in primitive societies, are sheltered behind the authority of religious beliefs, seems to us, at first glance, a strange enough mixture. There are many of them to which we would subscribe; the utility they have for social life would be clear to us. To obey the elders, show oneself generous to friends, live in peace with one's neighbors, keep away from other men's wives, such are, according to Howitt, the prescriptions imposed by their divinities on the Australians he has observed. The gods of the Andamans, likewise, punish theft, murder, adultery, falsehood. In *Psyche's Task,* Frazer, after having taken into account all that primitive superstitions cost humanity, adds that many times "folly mysteriously empties into reason."

Without the scruples engendered by a great many beliefs which seem to us fantastical, would man have been so readily inclined to respect authority or property; would he have understood the sacred character of the conjugal bond or even of human life?

Side by side with those prescriptions whose morality is estimable, even in our eyes, are many which seem to us shocking or at least indifferent. Does not the Bible, itself, often give us such an impression of heterogeneity? "If thou seest the ox or the lamb of thy brother astray, thou shalt not turn aside from them, thou shalt not fail to lead them back to thy

brother," says Deuteronomy. This is an admirable precept of human charity. But, as Reinach remarks, here, in the same chapter, are precepts quite different in spirit. "Thou shalt not labor with an ox and an ass yoked together. Thou shalt not clothe thyself in a fabric of wool and linen mixed together." Thus, a prescription of charity and honesty toward one's neighbor is placed exactly on the same level as a counsel relative to personal toilet or the cultivation of the fields. Such mixtures are the rule and not the exception in primitive societies. The gods of the Andamans, represented to us as the guardians of morality, forbid, as emphatically as theft or murder, certain ways of cutting up meat or certain confections of wax used in sorcery. For the Australians, studied by Howitt, the consumption of forbidden foods is as grave a crime as adultery.

The conclusion that must be drawn from all this is not that religion is indifferent to morality, but that the ideas of primitive societies about good and evil are different from ours. The food *taboos*—which forbid the touching of certain flesh or certain grain—are, in their eyes, things as grave as a lack of respect for the aged. The sacred rules of the caste system impose on Hindus of the same caste obligations of mutual assistance: they forbid them, with the same authority, as an unpardonable crime,

to eat in the presence of a stranger. The two sorts of prescriptions leave, when violated, the same feeling of remorse. They both form, with the same title, an integral part of the moral life.

Moreover, some prescriptions which seem to us indifferent, morally, assuredly serve, it may be by repercussion, the cause of morality.

Thanks to the terror inspired by the invisible or superior forces with which certain beings or certain things are charged as though by some special electricity, material force is not the sole ruler; it encounters limits. It learns to respect the rights of the absent or the weak. A straw placed across the threshold of the hut, the image of a crocodile attached with a red cord to the leaves of a tree, makes the thief hesitate. Scruples enter into souls, and, with them, the habit of resisting impulses, of controlling passions, which habit is one of the conditions of moral life. From this point of view, customs which are most shocking to our humanity can find a justification. In the *Early History of Kingship,* after having described the ceremonies of the kingdom of Calicut, where one sees gladiators have themselves killed, under the eyes of the king, in pretending to assail him through hedges of lances, Mr. Frazer adds, "During the last ten days of the festival, the same magnificent display of courage, the same sterile sacrifice of human life is renewed with-

out truce. Who can say, however, that any sacrifice is absolutely sterile if it bears witness that there are men who prefer honor to life?" In a general fashion, is not asceticism, which is an essential element of the religious life, the best of preparations for the effort all moral life exacts? As Durkheim remarks, it is indeed true that it is "by the manner in which he faces pain that the grandeur of man is best manifested."

Moreover, if one wishes to appreciate at their true value the services religious beliefs and practices have been able to render morality, it is necessary to take into account not only the virtues they cherish or the habits they inculcate but, above all, the state of feeling they develop.

There is no moral life without dualism. Every imperative precept implies, in one form or another, what Pascal called the doubleness of man. Every philosophy expresses it after its fashion; a soul commands the body, a reason orders the feelings, a humanity subdues the animality. These antithetic terms are, as it were, the two poles of the system of values, thanks to which a hierarchy of types of action can be established. Now, is not the mother-antithesis, the remotest origin of this hierarchy, precisely that which shows us, as separated by an abyss, the sacred and profane world? Over this abyss, indeed, bridges can be thrown. And they are precisely

the rites and ceremonies which permit regenerative communions. But one never enters the sacred precincts without great deference, emotion if not anguish at one's heart, so redoubtable as well as beneficent seem the forces which circulate therein. And in this lies the root of that sentiment of respect which furnishes, as Loisy remarks, to all morality, its kernel.

We call these forces redoubtable and beneficent; it is important to retain the two characters at once. According to Durkheim, religious beliefs translate the new power which arises from the coming together of consciousnesses. This power is certainly coercive. But, along with this, it is adjuvant. It strengthens at the same time that it restrains. Does not the individual feel as though raised above himself by the wave of collective emotion? This is why we are not content to say, with S. Reinach, that religion is the ensemble of scruples which forms an obstacle to the free exercise of human faculties. The obstacle-scruple is a definition still negative, not to say pejorative. We must not forget the surplus of vitality which is the benefit of all association. Souls which feel pass over them this regenerating breath, without knowing exactly from whence it comes,—as if it were the breath of the great mouth of the spirit which Hugo invoked—draw from it an exaltation, based on gratitude and hope, which regener-

ates them. Religion, even the most primitive, is not only a system of checks, it is, also, to borrow Taine's expression, a pair of wings. Adoration mixes love with fear. And this, doubtless, is why the Good of the moralists has always a double aureole; it is at once imperious and attractive. Duty demands that we bow down before it; the Ideal can and will be loved. This is a double proof that morality reflects religion.

The construction with which the sociological school concludes does not lack grandeur. It incorporates numerous observations. It adjusts to one another the ideas usually put in opposition, and makes of them a synthetic theory at once audacious and reconciliatory.

Is this to say that it has already gained its cause? And, moreover, if it should triumph, would we be justified in drawing from its victory the conclusion, "Without religion, no morality"? It can be devined with what malicious pleasure certain people would hasten to oppose "sociologism" to "laicism" on this point, if such were the case.

Let us try, then, to ascertain what we would have to retain of the objections raised against the Durkheimian theory. There are not a few thinkers who, while quite appreciating the originality and fecundity of this theory, refuse to admit that everything in the

life of the spirit can be explained by society, and, especially, that everything in the moral life can be explained by religion. They maintain that, side by side with religious beliefs, properly so-called, forces of quite diverse natures can concur in the formation of moral consciousness.

In truth, they agree that it may be difficult to discern these forces in the obscurity of their origins. Not only because at this distance all is confused for us, but, more especially, because for the primitive mind, itself, nothing is yet distinct. To separate viewpoints, appreciate the various sorts of values proper to each—economic or political, esthetic or moral—is the attribute of the civilized man. The soul of primitive man resounds to all the winds with all its chords at once. Lévy-Bruhl, in trying to make us understand *the mental functions in inferior societies,* expresses this by saying that the law of participation reigns therein. All is in confusion. An animal becomes a man and a man an animal. Each being can be, at one and the same time, itself and its opposite. The primitive mind does not recognize barriers. For this reason we may call it "prelogical." An observer who lived long among the Kaffirs said that logic was as becoming to them as a swallow-tail coat. If this is true in the order of judgments of reality, with how much greater reason will it be true in the order of judgments of value.

These categories of appreciations are distinguished from each other only with great difficulty. Primitive sentiment is a veritable moral nebula: the various elements which are distinguished later are still indistinct therein.

Nothing could be more natural than that the religious note should dominate in this nebula. If the participation of ideas is so widespread in primitive societies, it is doubtless because men, therein, think collectively much more than individually. Group beliefs enjoy an unequaled authority and scarcely tolerate differences of opinion. They tend to usurp everything. It is not astonishing, then, that the quasi-universal criteria of good and evil should be most often of the religious order. It is through the medium of religion that things or beings are normally appraised. This amounts to granting that religion, in the beginning, dominates everything. Is this to say that it creates everything? It raises its spiritual force, like a monstrance, above the natural tendencies of men. Does this mean that all their tendencies are derived from their beliefs alone?

There is at least one zone in which it appears certain that, from the beginning, independent forces have played their part. This is the realm of practical technique. The thousand processes men employ to feed, clothe and lodge themselves, involve at least a minimum of direct communication between

their minds and things. Certainly we see that, even here, imperative traditions do not rest idle. Beliefs press upon technique, sometimes to suggest inventions, the most often to prevent them. Man is in no wise free to act as he pleases, even on things. It is none the less certain that he learns to understand their properties in enregistering the results of experiences, in a vacant corner of his mind. As Belot puts it, do we not see, in the hunt, the kitchen, the workshop, numerous technical activities already "free and profane"? This is proof that, even in primitive societies, there is a fairly large field where the shadow of religion does not reach.

But perhaps that which will be granted, readily enough, to technical activity, will be refused to moral activity. Precisely with this latter, scruples intervene which man does not feel in the presence of plain nature. Values, whose existence implies that there is a sacred world, must be taken into account. How can this be understood without religion? It leaves technique alone, granted; but as to morality, it holds and retains it in its power.

That religious beliefs and moral practices usually present themselves to us as closely associated can no longer be denied, after so many correlations brought to light by sociologists. But association is not identity. Tendencies which are consecrated by beliefs can nevertheless be found outside of these lat-

ter, or can develop of themselves according to their proper spontaneity. There will be a post-religious morality. There has, perhaps, been a pre-religious morality.

To understand this anteriority it is sufficient to recollect the part instincts can play in the formation of morality and also the examples the animal world offers the human world. Religion is that which is most lacking to the animals. No trace of worship is to be found among the ants, the bees or the beavers. And when Michelet shows us the dog, feeling a sort of religious stupor, before the infinity of the sea, it is the poet speaking. But difficult as it is to see at work, among our inferior brethren, a belief leading to rites, it is quite as difficult to refuse them a beginning of morality. The study of *animal societies* long ago revealed to Espinas the embryo of more than one virtue, family or tribal. Pelicans, seeing one of their number fastened to a tree by Mexicans, bring fish to nourish him; this act of fraternity is so certain that the Mexicans count on it to procure themselves fish. A dog, having caused the death of a familiar cat, manifests evident remorse. The feeling for collective property, with the rights and duties it confers or imposes, does not seem alien to certain groups of animals any more than does respect for authority. What does all this indicate if not that a morality in

germ exists there, where no religion is in question.

But, for the human world, itself, would not such a conclusion, *mutatis mutandis,* be legitimate? For any one to be able to say that religion engenders morality, it is quite necessary that religion should exist, and, for it really to exist, it is certainly necessary that it should be constituted apart, guarded by a proper system of ideas and institutions. Societies are known which have not yet projected their divinities beyond themselves. Lévy-Bruhl, alluding to those Australian tribes whose members seem to identify themselves without difficulty with certain animal species, observes that, compared with that mental state which implies a sort of immediate communion, clearly religious representations appear a "product of differentiation." Morality cannot gravitate around the temple before the temple is raised: and, nevertheless, no society, from the first moment of its existence, even if it has not built a temple, has been able to do without morality. There are always rules for the common life, even where there are as yet no myths or rites.

Now, when religion has been constituted apart, when a cult more or less complex commands various practices, when beliefs make larger and larger use of the consecrating power they reserve to themselves, then it is not rare to see appear, outside the sacred enclosure, in the free air, what might be

called offshoots of morality, capable of becoming great trees in their turn.

In his lectures on *Religion, Science and Morality,* F. Buisson relates an example, taken from Marillier's courses. Among certain Indian tribes, a formal taboo exacts that a woman should go outside the village for her confinement. A woman is seized with the pains of childbirth. The cold is intense. There is dug for her, in the snow, at some distance from the huts, a great hole to serve her for shelter. The traveler who relates this incident saw the man take his wife in his arms and carry her to this snowy trench; he wept bitter tears, foreseeing that she was going to die there. "Imagine, *per impossibile,* this man making one more effort, daring to violate the taboo, opposing his feeling of humanity to the sacred tradition of the clan: imagine some of his kindred touched by the same feeling, siding with him and taking it upon themselves, in defiance of the taboo, braving the black looks of the elders and the menaces of the medicine man, to authorize the poor woman to remain in her hut,—you would have independent morality making its entrance into the tribe."

Does it not often happen thus that feelings achieve recognition as moral without the approbation, if not against the traditions, of religion? Instincts of sociability, personal sympathies, regard

for the recognized interests of groups, various forces at work in the relations between men, do not these work, side by side with religious beliefs, to mold morality? And certainly the authority which religious beliefs impart to all the commands they sanction is such that the attempt to borrow it must be made spontaneously even for prescriptions originally profane. The gods are called to the aid of life. They are taken as witness. They are invoked as guarantees. But, natural as such tactics may be, especially for minds for which everything is confused, they are not always applicable. The fusion of theological and moral values becomes difficult when the commandments of religion and those of life seem to contradict each other. From then on there is a separating out of functions. "Laic" law is set in motion and a morality with the same tendency bears it company.

At what moment, precisely, does the scission take place? It is here that our observers disagree. It is necessary that the "sphere" in question—that of obligations which are not of religious origin—should have acquired a certain volume for it to become visible to all eyes. And, for it to acquire this volume, there must be quite extensive and complex societies, where the diversity of the elements which must be made to live together raises unforeseen problems, calls for new solutions. It is when

the Roman city becomes an empire that its "civil and profane" law, as Cuq says, attains its full autonomy. But the day when the tendency bursts into blossom is not that of its germination: and that a clear-cut scission should appear is certainly proof that virtual differences have long preexisted.

Are we, then, to conclude that morality has two sources and that the whole problem is to distinguish their relations? By holding to this conclusion, we would run the risk of letting the clearest benefit of the new sociological theories be lost. Their originality consists, remarks Pécaut, in showing themselves, in their very daring, "singularly conservative and pacificatory." They aim rather to pacify than to set in opposition free-thinkers and believers, in showing them that they are, the one party as well as the other, sustained and contained by one and the same authority, namely that of the collective consciousness.

In supporting himself on this superior reality, Durkheim thought to have established, and as it were justified, religious representations by a new method. These representations—we have seen for ourselves—should no longer be considered either aberrations of the individual imagination, speculating on words or interpreting dreams, or the inventions of artful priests. They express the sort of

astonishment men feel before the exalting, "hyper-spiritual" force which arises from their own union; a force which, in fact, manifests itself at the same time, in them and above them. Their communion recreates it at the same time that it regenerates them. It is the source of the many "verities" which the religious system translates in its fashion, fulfilling, thereby, a social function of the first importance. The sociological interpretation brings to light the strata of facts on which this system is based. Call these projections, the myths, appearances if you wish: what Leibnitz said of perceptions, themselves, must be said of them. They are "well founded appearances."

It must be recognized that this justification is also a limitation. Is the authority religious beliefs possess the same after sociological interpretation as it is before? They present henceforth the character of intermediaries. They are means at the disposal of a terrestrial power which precedes them and goes beyond them. We can no longer say, transposing the Platonic image, that they are the sun of the moral world. The praise is not appropriate, for their splendor is borrowed. The true center of attraction lies in society itself. Religion, playing its rôle of guardian of values, as Höffding has said, is no longer more than a superintendent of the group. What needs does this latter feel? What are the aspira-

tions which torment it? What forms are taken by the ideal which, like Israel's pillar of fire, goes before it? In replying to these questions, we will perchance find the *primum movens*, the principle of impulsion and direction.

At once we comprehend that the rules which the group, for its survival, seeks to make respected are not necessarily all attached to clearly religious beliefs. Useful and almost inevitable intermediaries, at the time when mental and emotional indistinctness is the rule, these beliefs are not, however, eternally indispensable intermediaries. The needs, the aspirations, the ideal of societies have other means of making themselves understood and obeyed. They have, for a long time, been able to depend upon values of which worship, properly so called, is not the cement. And, indeed, they are obliged to do this systematically when the principle of social unity is placed elsewhere than in identity of religious beliefs: where the dissident become fellow citizens, religion loses its moral monopoly. Then the authority of the collective conscience drops the zaïmphs, the prestigious veils, strewn with stars, with which it has so long been enveloped. It no longer borrows the mouth of oracles to give orders.

In the vast and complex groupings, at once centralized and heterogeneous, which modern nations are, religious beliefs tend, more and more, to be-

come "private affairs." We leave them free as all other opinions, but we can no longer confide to them alone, the control of the rules which are the guardians of the life of nations. Modern societies wish to express directly their essential requirements.

Shall we hear it repeated that theirs is a voice without authority? After the tragic experience where so many thousands of men, believers and unbelievers, have sacrificed themselves at the call of the Native Land, who can still say that the voices of the nations are not heard when they speak without intermediaries? This, also, is a "lesson of the war," which it would be wise not to forget in time of peace.

CHAPTER VIII

VALUE AND SCIENCE

THE ORIGINS OF POSITIVE TECHNIQUE

We have shown that judgments of value have for function to formulate, not the natural properties of things, but the desires of men living in society. Whether it is a question of art or morality, religion or economy, they present themselves to the individual as so many norms according to which he must direct his inclination, orientate his sensibility, hierarchize his tendencies; they define the forms of the ideal.

Judgments of existence seem, at first glance, of a quite different order. They aim at making us understand reality as it is. They would be verities, that is to say, propositions verifiable by experience or logically demonstrable. Whichever of the criteria one may prefer—logical demonstration or experimental verification—one thing is certain; in order to make use of it, it is necessary methodically to set aside all that which, as tendency or rule, translates the movement of souls. It is one thing to appre-

ciate objects, to note them as desirable or undesirable, useful or noxious, beautiful or ugly; it is another thing to establish their existence, classify them according to properties, determine according to what laws they reappear, fix the relations of these laws among themselves. These are all complex operations which imply, first of all, an effort to free oneself from prejudice. The will to be objective excludes, by definition, all other desire. It must silence subjective appreciations, even if they are imperative, that is to say, even if the power of society tries to impose them on us.

One is, naturally enough, tempted to define this attitude by an antithesis: If, in matters of value, collective representations are supreme, in questions of truth, the last word rests with personal thought. The rules of the Cartesian method, where the scientific spirit becomes conscious of itself, are, first and foremost, a counsel of independence: hold nothing above question, do not be overawed by anything. Commenting on the lessons of Descartes, Brunschwieg writes: "Before Descartes, when people put to themselves the questions, What shall we know? What shall we believe? What shall we do? they looked behind them. All the answers were already inscribed in books, sacred or profane. Since Descartes, we look before us. All, certainly, is not to be discovered, but all is to be examined anew, to be

seen with our own eyes, to be judged by our own mind."

Moreover, each of us verifies by experience that the act of discovery is a supremely personal act. The assembly excites and stimulates but appears little fitted, by itself, for the work of intellectual invention. For the dissociations or syntheses this latter implies, there must be a mustering of all the forces of the attention which requires concentration. Creative reflection is the lover of silence and solitude.

Because men have been able to attain this free reflection it has been possible to constitute science; that is, the system of verities whose whole authority rests on the proofs they are able to furnish to minds, the statements or the demonstrations which are accepted by the individual only because he is able to repeat them for himself. According to the order of phenomena studied, either inquiries or demonstrations have the larger part. Here one begins with principles, there with facts. But whether it be of the mathematical or experimental type, scientific truth does not want to owe the adhesions of minds to any arguments but those of an intellectual order. Does it not seem that to leave reason face to face with nature, without the interposition of society, is the prime condition of all discovery? This is why it can be maintained that

the system of verities is set up in opposition to the various series of values.

Once constituted, however, it does not fail to take its place in the world of values.

Acquired verities present themselves as values; and, as values also, the methods by which they were acquired. Science claims respect for its results as well as for its discipline. Not content with appealing to the devotion of seekers, it demands, with increasing authority, that societies should assure it the means of development. It is becoming the center of a world of institutions which serve it. To justify these high claims science can, moreover, invoke quite diverse arguments: the material services it renders, the intellectual qualities it develops, the esthetic and moral satisfactions it procures. It is becoming a social power: on it are founded great hopes, not only for instruction but for education; not only for the formation of minds but for the orientation of consciences.

We will be better able to judge the rôle this fourth power—intellectual power—can play in society to-day if we first of all consider its genesis. Did it show itself as early as the first phases of social life, and under what forms? Or was it, indeed, constituted only after a certain differentiation? And this differentiation once effected, what conjunctions are still possible between scientific veri-

ties and other social values? This is what we would like to make clear.

Every one grants, to-day, that if a group of definite ideas touching the properties of things and the laws of their production has been able to free itself from the primitive dream, it is because of the necessity in which man found himself of exercising his ingenuity in order to survive in a world often menacing his life. In the beginning is action. If it encounters obstacles, ever so little, in exterior things, and diverse possibilities in the inner depths —in the organism—action tends to arouse thought. Before conditions of fact analogous to those which have formerly procured him success or failure, the remembering being seeks to foresee. And in proportion as his circle of foresight enlarges, his actions are able to take more and more complex forms. He will not be content, as has been said, with adapting himself to his surroundings; he will strive to adapt his surroundings to himself. He will multiply what Roustan likes to call offensive adaptations. The capacity of resisting cold can be acquired by animal species through a sort of mechanical selection: those whose organism does not lend itself to the conservation of heat necessary to life are eliminated; the others survive and make their type predominate. The human species has command of other solutions.

It manufactures clothing. It constructs shelters and builds therein hearths where it keeps burning the precious fire. To defend itself thus against the cold is to begin the methodical transformation of things. The ensemble of processes of this sort constitutes practical technique which, in its inner aspect, is already science.

When, in order to obtain a result which is precious to him—the prosperity of a harvest, the solidity of an edifice, the health of a child—man invokes the aid of invisible forces, redoubtable or benevolent, as the case may be, there again he follows rules, he employs traditional processes. Their ensemble, also, constitutes a technique. But it is a "transcendental" technique, guided by beliefs which have bearing on a sacred world. Positive technique deals, not with the mysterious powers of invisible beings, but with the properties of things learned by experience. Now, the successes of such a technique imply knowledge which can already be called scientific. The rule of action is the application of a verified law. The means employed with an end in view is only another name for cause. That which technique anticipates is precisely that which science seeks, the constancy of natural sequences.

It is not, then, astonishing that the two disciplines should, in the beginning, be closely bound together. We have been able to point out that, even to-day,

when science would seem to have conquered its full autonomy, it would be impossible to understand its development aside from technique. The demands and the offerings of this latter, the problems it sets inquirers, the means of action it puts at their disposition, even the recipes and the manual dexterity of which scientists make use in their laboratories remind us, in more ways than one, that the bonds between thought and action are not cut. How strong these bonds must have been in the first phases of the life of human societies! It is practical invention that gives rise to the first scientific discoveries. The maker of the simplest tools can not fail to glean, in the course of his work, observations which are already laws. "Primary qualities of matter, properties of natural agents, gravitation and heat, live force, shock, transformation and concentration of energy," are not all these ideas in germ in the workshop of the first polishers, potters or blacksmiths?

L. Weber, calling upon us to admire the wealth of primitive inventions of which our museums hold specimens—from the borer to the propellor and from the polisher to the mortar—claims that it is not possible to understand this wealth without representing to one's self a phase of human history when technical thought, fresh and free, enjoyed already a certain autonomy. If the

state of stupidity and uneasiness, sometimes attributed to the savage, had been universal, humanity would never have begun to conquer the world. There was necessary, along with the stimulation of action, that liberty to meddle with things which is the father of scientific experimentation. And, doubtless, other ways were soon opened to it: but in all that concerns scientific discovery these ways were blind alleys.

Language, also, is an instrument. And whoever makes use of this instrument is capable of producing, on those he interests, actions at a distance, very different from the mechanical action which answers his purpose as polisher, potter or blacksmith. From a distance he wakens hope or fear, he excites the dangerous or useful action. From this comes the belief in the fruitfulness of invocations, of incantations, of all that is action by speech: thus came into being magico-religious technique—what we called transcendental technique—and its superabundant vegetation could not fail to smother the seeds planted by the positive technique of the first ages. This explains why, after its brilliant beginnings, humanity for so long merely marked time. Science could not take its full flight till positive technique had won back the lost ground from its enemy sister.

How much of this theory shall we retain? Are

the forms of thought and the phases of its progress as distinct as it would seem to imply? We would have to doubt this if it is true that, on many points, positive and transcendental technique find occasion to unite their efforts; and if it must be admitted that magic, for example, with its mixed retinue of beliefs and recipes, opens up roads for science.

This is one of the points on which ethnologists and sociologists have been most insistent these last years. They warn us that it is a mistake to see, in the beliefs bearing on the invisible world constituted by sacred forces, only their power of inhibition. Though they sometimes hinder the knowledge of things, it happens much more often that they enrich it. Their rites are often found to be precious recipes. Along with the pronouncing of the sacred words, the chanting of the refrains which attract spirits or drive them away, matter is triturated, ingredients are heated, the entrails of animals are examined, or perhaps these animals are given special care which preserves their life. Many of these operations are capable of bringing in, apart from the mystic aims which preside over them, various natural advantages. Should the operator but remark these and try to find from what chain of sequences they result, he is on the road of science.

Totemism suggests to certain tribes that they should abstain from the flesh of certain animals: it

cannot be eaten except on solemn days to communicate with the principle which constitutes the vitality of the tribe. But, to be able to eat of it on those days, it is necessary for specimens of the animal in question to be kept within reach and taken care of as well as revered. According to Frazer, it is thus that totemism, aiding humanity to triumph over natural instincts, must have presided over the beginning of raising animals. Do we not see influences of the same order directing attention toward the culture of cereals? To appease the hunger of the dead, various foods are placed near the corpse. No one dares touch them. Should the seeds, mixed with the aliments, germinate on the ground which has been cleared of brush and turned over, the tumulus, in the proper season, will produce an unexpected harvest. Humanity will thus, through the worship of the dead, be led to agriculture. But what shall we say, then, of metallurgy and chemistry? He who seeks the magic stone is led to note all sorts of combinations of elements. And was not the discovery of the alloy of tin and copper which produces bronze due to the desire to fabricate amulets with spangles of brilliant metal? "All primitive metallurgy," writes Salomon Reinach, "seems to me a chapter from the *history of religions*." And this would be proof that religious beliefs, far from being merely powers of inhibition, are capable of stimulating the

curiosity of minds, in furnishing them the occasion for acquiring positive knowledge.

It is true that many ethnologists or historians would beg leave to distinguish sharply, here, between religion and magic: the former implying appeal to all-powerful wills which people endeavor to conciliate by prayers, offerings and sacrifices; the latter, on the contrary, acting of itself on things and constraining forces by laws of which it holds the secret. The rain-wizard, by taking a branch and with it throwing water from some pool toward the four corners of the horizon, is reputed to cause the rain to fall. The sorcerer who thrusts his needle into the heart of a little figurine representing a detested person, or triturates parts detached from him —tufts of hair or nail-parings—thinks to determine directly the death of that person. He anticipates, here, certain general laws such as "like acts upon like" or "he who modifies the part modifies the whole." But he does not invoke superhuman wills. Fossey goes so far as to write, "The magician makes no appeal to the supernatural: the destruction of an image brings about the destruction of the original as fire causes water to boil. There is not the least mystery in it." The scientific investigations of which the magician is capable would, thus, be more easily explained. He is never embarrassed by the imperative, collective representations which

make up the paralyzing force of religions. This outlaw is already an individual mind in close converse with things.

Does this conclusion give an accurate idea of the intermediary situation magic occupies between religion and science?

That the magician should often be considered outside the law, and even that he should be put under the ban of society by religion, once differentiated and provided with all its proper organs, does not in the least prove that magical conceptions are formed apart from religious beliefs. The magician, also, is an initiate. The operations he accomplishes are rites. They could not be carried out indifferently, no matter when or where. They require all sorts of ceremonial precautions. It is clear, moreover, that the forces set at work are far from being purely mechanical forces such as those which belong to the domain of an exclusively positive technique. The magician, himself, often appeals to supernatural forces. Does he not, for example, enter into pacts with demons? But, most of all, his operations imply belief in the efficacy of those impersonal forces—of the type of the Melanesian *mana*—which are, at the preanimistic phase, the kernel of religion; forces which duplicate natural forces without, however, being confused with them; qualities which are

added to the other qualities without affecting them. "This addition," according to Mauss and Hubert, "is the invisible, the marvelous, the spiritual, in short, the spirit in which resides all effectiveness and all life." It is through his empire over forces of this special nature that the magician is king. And this is why, while he becomes more and more distinct from the priest, he remains so long distinct from the man of science.

If, however, the paths of science are so well opened up at so many points by magic, it is because this latter, in separating itself from religion, enters effectively into more direct contact with things. Treating the gods more freely, it handles matter more freely. It delights in all sorts of experiments, it acquires a skill, the knowledge of which cannot fail to be beneficent. "It leans toward the concrete as religion leans toward the abstract." It mixes more and more in practical activities. And thus it comes to pass that it shelters, with its mystic authority, the budding positive technique. Pursuing at leisure its work of research, it accumulates observations, it prepares indices which are precious resources for scientific reflection. "The alchemist magicians, the astrologist magicians, the doctor magicians have been, in Greece as well as in India and elsewhere, the founders and the workmen of physics, of astronomy, of natural history."

Magic would, then, in some fashion, form the bridge between religion and science. Starting with collective beliefs and utilizing them in its own way, it would develop therefrom that personal research which investigates nature directly. And thus it would no longer be necessary to assume, with Weber, the primacy of a technical thought whose free initiatives, in a period which was, as it were, the Eden of research, would precede the imperatives of religious thought. The first word would rest with collective beliefs, so powerful, as all testimony seems to agree, in the beginnings of social organization. Technical thought would be, itself, only a product of differentiation.

This does not mean, however, that technical thought is not to be seen at work, even in the period dominated by religious thought. Or that it is not able to amass material and develop its potentialities except within the outlines set by beliefs bearing on the world of sacred things. If there exists a world of sacred things, there exists, also, a world of things profane. The former are things "set apart," dangerous to manipulate, which should not be approached except with quite special precautions and more or less complicated initiations. Outside of this "forbidden" zone, the activity of the human mind should, by definition, be freely exer-

cised, in reckoning with the result of experiences which teach it the properties of things.

Is it not precisely due to the exercise of these faculties that it was possible to build up that ensemble of instruments and processes which so many ethnographers correctly describe as separate from the system of rites and beliefs? The obtaining of fire by rubbing, gyration or sawing, the processes of pounding, triturating, grinding grains, the distillation of liquids, the fabrication of clothing are all so many operations which imply at least a minimum of positive knowledge, resulting from the mind's direct commerce with nature. Those who insist the most upon the distance which separates rational thought from primitive thought—which latter would be essentially prelogical by very reason of the confusion of ideas which collective beliefs favor or impose—are obliged to recognize that in practical life, even if entirely inferior societies are in question, man reveals himself capable of rational inferences. "If he has struck down two heads of game, for example," writes Lévy-Bruhl, "and he finds only one to pick up, he will ask himself what has become of the other and he will hunt for it. If the rain surprises him and makes him uncomfortable, he will set about looking for a shelter. If he encounters a savage animal, he will set his wits to work to escape from it, etc."

Auguste Comte had seen this clearly when he wrote, "In spite of the mental ascendency of the grossest theology, the daily conduct of active life must always have produced, in regard to each order of phenomena, a certain sketch of natural laws and corresponding previsions."

Furthermore, if we were to refuse to man this capacity for inference, should we not, as G. Milhaud points out, be setting him lower than the animals? Many of these know how to utilize their past experiences. If, after various fruitless efforts to escape from an uncomfortable situation, a certain process succeeds, they remember it and strive to generalize its use. They thus create for themselves what might be called an incipient technique.

Shall we say that if man's technique so quickly becomes infinitely superior to that of the animals, it is just because of the ideas he develops of magical forces which govern the invisible world? We may grant that his desire to dominate nature through their intermediation leads him to multiply his experiences, to widen the circle of his knowledge. And no one could deny the manifold occasions for obtaining information which magical practices must have afforded scientific thought. But, in the first place, magic is certainly not alone in offering these occasions. At war and at the chase, at the forge and at the cooking fire, man manipulates matter

and spies upon reality. He is able to learn, on free ground, lessons of all sorts. But these varied lessons serve the progress of scientific technique only in so far as modes of thought different from those connected with magico-religious observances are put into action. Two principles, we are told, govern the thought and action of the magician, "like acts upon like" and "he who acts upon the part acts upon the whole." Do these principles hold true in everyday life? In order to kill a kangaroo or an emu does it suffice to transpierce their effigy with a bone needle? To cook the whole animal, once killed, is it enough to set one of its paws over the fire? Certainly not. Numberless experiences prove the contrary. These everyday experiences dispose the mind to seek, by noting regular properties and verifiable relations, other laws than those which govern the world of sacred forces, docile to the sorcerer's enchantments.

The criticism will be raised that we are assuming, here, exactly the distinction of which the primitive mind is incapable. For it mixes everything together. Feelings "participate" intimately in ideas, values in realities, the invisible in the visible. Suppose it interested in a certain effect, how could it discriminate between the share in its causation due to the rite and that due to a natural process? Certain observers of inferior societies doubt if they

can conceive of purely physical action apart from mystical action. In regard to the *mana,* the quasi-spiritual force employed by the sorcerer, Mauss and Hubert tell us, "It is the unrivaled force, the veritable effectiveness of things which reenforces their mechanical action without annihilating it. It is that which makes the net take fish, the house stand firm, the canoe hold staunch against the sea. In the fields, it is fertility; in medicines, it is the salutary or deadly virtue; in the arrow, it is that which kills." How is its part to be separated out if its action is always present? Shall we say that its failures reveal its limits? It is well known that nothing is more difficult to prove than the failure of a magical activity. To explain why the woman on whom a spell has been cast remains alive, or why the charmed animal escapes the hunters, the sorcerer never runs short of reasons; a badly conducted operation, ritual conditions poorly observed, lack of faith on the part of the assistants or the interested parties. Beliefs of this nature obstruct minds to the point of rendering them impermeable to experience as well as inaccessible to logic. This is why the dissociation inferred in order to explain how positive technique is built up apart from magical rites is exactly the operation which is least easy for primitive intelligence.

That the operation is difficult no one doubts. The extreme slowness with which scientific thought frees itself is the best proof of this. It is quite true that magico-religious beliefs tend, initially, to mix themselves in everything, and that the state of mental and emotional confusion which seems characteristic of the first phases of intellectual life hardly favors experiments which aid in distinguishing the properties of things. But the fact remains, the fact which could not be explained if we did not grant to man a certain capacity for observing exactly and reasoning about his observations, however humble and hesitating we may imagine this capacity to have been in its first movements. The fact is that methods of practical action were invented and transmitted, that tools and apparatuses were constructed to apply these methods and extend their investigations. Never could these "germs of positivism," as Comte called them, have come into being and flourished if the whole soul had been, from the first, completely absorbed by religion or even magic.

We do not need even to regard these positive inventions and discoveries as the fruits of a distinct period of pristine liberty, a period too soon ended, wherein technical thought was unimpeded. Neither do we wish to advance the hypothesis that it was only restricted and never aided by transcendental

technique. It is clear that, when magic becomes distinct from religion, all sorts of experiments are tried, properties remarked, laws sketched out, and that thus a whole treasury of observations is built up that science, properly so called, will not fail to utilize. But we maintain that if a science comes to be constituted, it is because man, in spite of overrunning imaginations, remained capable of carrying through experimental reasonings, under the urge of necessity. Without this capacity his technique would not, as a matter of fact, have risen above that of the animal.

CHAPTER IX

VALUE AND SCIENCE
(Continued)

THE ORIGINS OF RATIONAL THOUGHT

If man's technique is raised above that of the animals, if it is refined and complicated by the intervention of a veritable science, the cause must not be sought only in the observations his experiences are able to suggest to him. In the systems he forms to order these observations lies the superb originality and fecundity. It has many times been observed that science progresses not by rules developed through practice but by theories and, first and foremost, by concepts in which the results of experiments are organized.

Now would not theories and general ideas and categories, themselves,—all that we attribute to reason—be, in their turn, a product of the special activity which is produced, in the primitive phase, from the fusion of consciousnesses, and whose most striking manifestations are those collective beliefs, imperious and absorbing, which constitute religion?

Through this new aspect, the two terms, religion

and science, which have so often been opposed, would find themselves once more brought together. Reason, also, would be found to have been reared on the knees of the gods and to have received its impulse, direction and even its very principles from primitive beliefs.

Even Auguste Comte endeavored to maintain a certain measure of continuity between the phases he distinguished in the development of thought. When man, seeking to explain nature to himself, imagines wills analogous to his own, this sort of spontaneous projection has at least the merit of giving him a general theory of the world. The mind would not have had the patience to erect a general theory, stone by stone, observation by observation. And yet some theory was necessary to stimulate and orientate his researches. For this reason we must rejoice in the first orgies of the imagination. They were fruitful after their fashion.

On this point, as on several others, Durkheim accepts Comte's line of reasoning. But he goes very much farther than his predecessor. He not only gives the imagination credit for having constructed our first general conception of the world, but he claims to be able to explain the genesis of those concepts and even those categories which render possible human judgment, the typical opera-

tion of human reason, by the first forms—the religious forms—of human thought.

This is an audacious thesis which takes its stand at the exact antipodes of that elaborated, at the same time, by another disciple of Auguste Comte. When Lévy-Bruhl, in trying to make us understand the proper nature of mental functions in inferior societies, insists on the prelogical character they present—all participating in all, and confusion of kinds as well as incoherence of reasoning being the rule—he widens the gulf between religion and science. So much and so well that, in the end, it seems hardly less than a miracle that reason should have appeared at all. We can hardly see how the faculty of reasoning clearly, taking the properties of things into account, was ever able to arise in such a world. It is precisely this impression of miracle that Durkheim wishes to dissipate. This is why, where Lévy-Bruhl widens gulfs, he multiplies bridges.

Perhaps that which seems to contradict the scientific mode of thought in reality prepares for it. There is always a logic at work, even in inferior societies. In fact, it is formed within the outlines and by the outlines of religious thought, itself the supreme expression of collective consciousness.

What arguments can be called, at the present time, to the support of this hypothesis? Durkheim seems to find arguments of three sorts. Now, it is

the principle of classification, of which the mind, in primitive phases, makes use to order its impressions; now, it is the character of the concepts which are opposed to these same impressions; again, it is the nature of the realities which serve as first model to these concepts.

Are primitive classifications founded on the real properties of things? They are much more apt to reproduce social divisions which they augment. There are numerous cases where one sees the universe, in inferior societies, divided, as it were, among the clans. It is not only certain men and women who belong to the clan of the raven, in the tribe of Mount-Gambais, but also the rain, the thunder, the lightning, the clouds, the hail, winter, etc. The clan of the venomless serpent comprises the fish, the seal, the eel, trees with smooth bark, etc. Thus things are classed according to the sacred ties which attach them to a group of men. The group is the kernel of the type. Logical outlines are copied from social outlines.

It should be noted, moreover, that the general idea, necessary to the organization of science, is not only a collection of impressions. The concept towers above the see-saw of impressions as the rock towers above the surge. It is the permanent element on which personal thought takes footing. It possesses, moreover, a character which is impera-

tive at the same time as impersonal. It is, in its way, an ideal which imposes itself, an exemplary type which tends to determine the way of thinking. What does this mean if not that the concept is a command, an expression of a collective power? It is, without doubt, in religious beliefs, that this latter makes its action most strongly felt. But intellectual ideas could not have been constituted without conserving something of the superior authority of religious beliefs.

And, furthermore, at what school could the central ideas which are going to order the whole life of the mind and even the investigations of science, be formed if not at that of beliefs? The *waka,* the *mana,* the *orenda,* by whatever name they may be called, are not these mysterious realities, omnipresent and all-powerful which overflow and bind together all particular things, the very type of force, of substance, of cause? In the same way, is it not by the solemnities that time is scanned according to a collective rhythm? Through consecrations, also, the parts of space are distinguished from each other in accordance with an order which is imposed on all. Thus all the framework of our mind is fashioned, as it were, by sacred axes. Religion, in translating the inspirations of collective consciousness, spontaneously prepares the way for reason.

It does not seem open to doubt that sociology,

thus understood, makes for the enriching of empiricism. When we try to represent to ourselves the series of adaptations which somehow constituted the genesis of mind, we still too often imagine the individual as alone in his contest with nature and putting forth his strength in entirely personal efforts to bring into some sort of order the incoherent multiplicity of impressions with which he is beset. We forget that, between him and nature, is imposed an intermediary which is none other than the social setting. The elements which compose it—veritable plastic mediators, as Cournot loved to say—are none the less active for being invisible and imponderable. The emotions, the representations, the volitions which owe their form to the life in common, the habits, not only of the moral but of the intellectual order, which this life imposes, are so many forces with which the individual must reckon, which sustain and contain him and canalize, in some sort, the effort of his thought. It is to the system composed by these forces that he must, first of all, adapt himself. It is from them that he receives his first intellectual discipline. From the moment when he tries to go beyond the zone of sensations, he encounters collective beliefs. He cannot see the world except through their prism.

But what becomes, in all this, of the idea of truth? How, if the only school at which man's mind is

formed, is the school of beliefs which translate, first and foremost, that emotional exaltation which results when consciousnesses are brought into contact, does he ever succeed in arriving at reality, finding its articulations, grouping beings according to their real resemblances, in short, reproducing, in the order of his ideas, the real order of things? Is it not, also, a miracle for him to be started on the way to scientific truths by the Sybilline inspirations of tribes in effervescence? The more clearly we see the collective origin of these first representations, the more, it seems, are we astonished at the idea that it could possess an objective value and bring scientific truths into being.

That they translate the needs, that they respond to the aspirations, that they express the ideal which souls have created, fired by the enthusiasm of a common faith, all this can be granted. It is more difficult to understand how and why they correspond to the reality of things. In short, though connection with the imperative beliefs of primitive groups is quite plausible when judgments of values are in question, it remains paradoxical when we consider judgments of existence.

It is not impossible, however, to attenuate this paradox if we remember how much less rigid the idea of scientific truth, itself, has become under the

influence of recent forms of the philosophy of science.

We asked how it would be possible for concepts derived from collective inspirations to correspond to reality and reproduce the order of things. But should we not, in these very demands, recognize an old illusion, the idea that the mind is a passive mirror and that, if all veils were drawn aside, things would come of themselves to imprint their image therein. Theory of knowledge long ago did justice to this representation. To know is not to reproduce: it is always to transform. And the order that the mind, with the aid of the concept, introduces into the chaos of sensible impressions, is, first of all, revelatory of its own forms. Now are these forms eternal and given from the beginning, *ne varietur?* Do they not undergo a progressive elaboration which takes into account the successes obtained or the failures encountered by such and such an idea put to the test? We are assured that even the history of science would reveal divers sorts of conventions in the origins of theories which have imposed themselves. Such of these theories as have been successful have been retained to serve as a center of systematization for our knowledge: those, be it understood, which best permit of the agreement of minds in satisfying their intellectual demands,

those which give the greatest satisfaction to that desire for harmony which we call reason.

Conventions at the root of science, desire for harmony at the base of reason, if we must accept these pragmatist theses, the improbability of the sociological thesis is by so much diminished. For what seemed to us hard to admit is that ideas which are only the residues of collective imaginations should be found to correspond, by a sort of pre-established harmony, to exterior reality. But if exterior reality is, above all, a matter fashioned by concepts, and fashioned systematically with a view to establishing a more and more complete agreement of minds, then it will be easier to understand how there could remain, even in science, something of the norms that rendered possible, in the time when religion was mixed with all social life, the first intellectual agreements. If science is essentially a source of agreement between minds, its kinship with the imperative and ordering beliefs of the earliest ages is more understandable than if it aimed at being a pure and simple reproduction of things.

Reasoning, in a word, would tend to assimilate the two types of norms, the practical and the logical, those which control conduct and those which direct the search for truth. Now, it is precisely this assimilation which arouses resistances. And these re-

sistances are founded on the feeling that the norms which preside over the search for truth have their own proper requirements which are far from always accommodating themselves to the suggestions of practical convenience or the demands of social tradition. If the mind had not shown itself capable of resisting these attractions and pressures, would the idea of scientific truth ever have been brought to birth? It implies an attitude quite different from that demanded either by regard for action or respect for traditions, the attitude which consists in letting things speak for themselves and knowing no other reverence than reverence for facts. Vainly will it be alleged that facts, themselves, imply choices of the mind, and that, through things, it is always the mind which speaks. Every one will, to-day, agree that the most simple perception implies a whole work of organization and that the best guarantee of its truth should lie in the connections it makes possible. But this does not signify that we hold for true either that which appears to us convenient practically, or that which appears to us conformable to traditional beliefs. Verification is a trial of a sort apart. The mind must prepare for it by endeavoring to free itself of all prejudice. The full force of its attention must be absorbed in the demonstration or the experimentation. It makes a vow to submit to the result even if painful

or shocking: it says *yes* or *no* when, having tried all criticisms, it "can no other."

Must we, then, agree that the individual who undertakes this methodical effort should set society aside? This way of putting the question might lead to further misunderstanding. For the seeker after truth works for society as he works by it. It reappears in the scheme of ends as in that of means. To demonstrate a truth is to render intellectual connection possible. A scientifically established idea tends, by definition, toward universality. It is intelligible, that is to say adapted to pass from one mind to another and prepare a set of general ideas accessible to all. All demonstration is, in the best sense of the word, a socialization. Moreover, the work of minds in quest of knowledge can be accomplished only by means of the instruments forged for and by the social life. Language, which is the support of the concept, is the best proof of this. Science is, above all, a perfectioning of language, which latter is the "product of collective elaboration."

Thus the mind, possessed by regard for truth, exercises a particular control over the agreement aimed at as well as over the means employed. The desire for harmony can be satisfied in more than one fashion; by various forms of constraint, by all sorts of prestige, by the exalting powers of en-

thusiasm. But science desires to have men communicate through their intellects put in presence of demonstrated truths. It is only then that the desire for harmony is called reason. Before these special values, it must be ready to make the pretensions of all other series of values stand back. It will no longer depend upon either authority or enthusiasm. More than this, it will always be ready to rectify, in the course of its discoveries, the concepts involved in words, as primitive thought, under diverse influences—religious, magical or technical—has been able to fashion them. It will, at need, fashion a language for itself, taking into account both the real properties of things and the rational aptitudes of the mind. Working on any special datum, it will remold it in accordance with intellectual requirements.

It is possible that we may discover, in this work, traces of conventions which are so many hypotheses the mind has tried out in its effort to render things intelligible to itself.

But we are not able to see why these conventions should remain bound up with the religious inspirations of the collective consciousness. It goes without saying that the effort of the mind to discover concepts which take into account the properties of things must have been exercised very early. It is unlikely that men should not have remarked

numerous real resemblances or regularities, even when religious thought dominated and covered everything with its imperative beliefs.

The classifications we are offered as examples, which divide the objects or the beings of the universe according to the tribes to which they are felt to belong, sometimes let it be seen that beings or objects are grouped after objective properties. The rain, the thunder, the lightning, the clouds, the hail, winter, which are attributed to the clan of the Raven, are of the same family in nature, also. The fish, the seal, the eel, the trees with smooth bark present, in varying degrees, resemblances to the serpent, emblem of another clan. Whatever hold religious beliefs may have had over the minds which built up these concepts, they have still shown themselves apt at noting similarities.

It is hard to admit that this aptitude is put into action only by virtue of religious beliefs; as it would be hard to admit that all the words which come to serve as supports to concepts are magic or sacramental words. In the first workshops of blacksmiths or potters, the artisan, in order to designate and have brought to him by his helpers, the tools of which he had need, must have invented words corresponding to the various sorts of tools, those which serve to hold, to beat or to model; tongs, hammers, polishers. It is inevitable that practical life should

suggest its classifications as well as religious life; both sets of classifications taking into account, in different degrees, two elements which no collective enthusiasm, it seems, would be able to create in entirety, the nature of things and the nature of the mind.

We are agreed that the nature of mind, like the nature of things, themselves, is subject to the law of evolution. There is no possibility of returning to the idea that reason is given fully formed and, as it were, fully armed. The clearest result of the vast amount of research and reflection on the conditions of consciousness is to advise us that, in these matters, also, history has its part. The centuries work to fashion the buckler of Minerva; reason, itself, is in the state of becoming; the form it takes on in the human mind is the fruit of a development. But whoever says development says germ. The most varied experiences—those furnished so plentifully by magic as well as those furnished by technique—would not have brought forth those categories we know if man had not reacted to those experiences according to certain modes predetermined by his very nature. Is this nature altogether a social creation? An example will suffice to show how hard it would be to admit this. Take Aristotle's well known phrase, *Man thinks because he has a hand.*

It is probable that because he is capable of seizing objects, of turning and manipulating them, of putting them from him and drawing them to him, man is more capable than any other animal of projecting things beyond himself, of objectivating his impressions; and this is the first condition of the exercise of thought. But this precious intellectual instrument, the hand, is not a social gift. It is conceivable that the use we make of our hands may be determined, in some measure, by imperative traditions; it has been maintained that the predominance of the right hand could be explained by religious reasons more than by organic reasons. No one, however, will go so far as to claim that if we have hands it is because we live in society.

This is proof that the forces born from the life in common have always a certain number of given forms to work on. Though you may set no limits to their power as aiding or compelling modifiers, they are not, for all that, the sole creators.

CHAPTER X

SOCIAL CONDITIONS OF SCIENTIFIC PROGRESS

Without doubt the pressure exerted by society, the exaltation kept up by collective representations, help the individual to organize not only his moral but his intellectual life. Nevertheless, we have not believed it necessary to grant that this assisting force was creative. Society would not have built up categories if a germ of reason were not given in the individual. We must add that this assisting force can easily become paralyzing and that, in any case, the liberation of reason remains a problem.

We are told that the religious authority of society works for the training of the budding reason. It remains, then, to explain what might be called the second birth of reason. A moment comes when it takes its stand in opposition to all tradition, when it holds its own against all collective authority. To think for one's self becomes not only a right but a duty. The intrinsic value of human reason is proclaimed.

This emancipation would remain a mystery if forces other than those which dominate ages of

mysticism did not enter in. For it is only too clear that these, imperative by nature, are normally conservative. *Obligatory beliefs,* commanding a certain number of practices relative to the objects given in these beliefs, are, according to Durkheim, the characteristic common to all religions. They would, then, have a common tendency to prevent innovations and to fear discoveries as heresies. An obligatory belief tends, naturally, to perpetuate itself; it creates institutions to defend it. Where a priesthood is constituted it usually works to elaborate a dogma. Now, admitting that the first myths contributed to awakening the reason, dogmas tend to lull it to sleep. They aim at an intellectual *status quo.* This means that, to their defenders, free curiosity would soon have the appearance of a sin. The ancient peoples, says Renan, always saw in science "a theft from God, a manner of defying and disobeying Him." The spiritual ancestor of the scientist, the magician who claims to enter into direct communication with invisible forces, and who puts into use the rules learned by experimentation, is usually considered an outlaw. The sorcerer is burned by the priests. With greater reason must the scientist, properly so called, be held suspect by the guardians of beliefs; if it is true that he is by definition a doubter; if, in demonstrating or verifying, he does not accept the intervention of any

authority, and if he seeks truth by the powers of his mind alone looking *forward* and not back. The essential demand of that new discipline, the scientific, is for liberty, for emancipation from all social traditions.

Among these traditions from which reason must be ready to free itself, must be classed not only religious beliefs, properly so called, but also the quasi-instinctive tendencies of societies, the ways of thinking peculiar to each and even their characteristic preferences. We see the intellectual life organizing itself inside definite groups, clans, cities, nations, under the influence and as though through the activity of hyper-spiritual forces which spring from the life in common. The forms of the intellectual life would seem, then, to be bound up with the structure of the various groups. Thought is, first of all, the thought of a social body. It follows from all this that there must be as many types of thought as there are types of association. And, in fact, it is well enough known that, in a general way, thought tends to take the color of societies. If a "psychology of peoples" is possible, it is precisely because peoples do not all react in the same way before the spectacles of nature or the crises of history.

Languages, themselves, bear clear witness to these differences. The study of the vocabulary reveals

how a people classes beings and things, while study of the syntax shows how they link ideas together. When once ways of speaking are consolidated they in some sort canalize ways of thinking. Thus systems of collective representations are constructed, each of which interprets the world in its own way. Each of them is a distorting mirror held up to nature. In this sense, nations put their mark not only on the land they cultivate but on the ideas they elaborate. In this sense, also, it is possible to speak of ideas as French, German, American, etc. But—here these expressions themselves put us on our guard—we would end with untenable paradoxes if we sought to maintain that thought expressed only social tendencies and habits. We must at least distinguish clearly, here, between the various orders of intellectual activity. The literature is said to be the expression of the society. This thesis is, in large measure, admissible if it is true that through legends and romances, dramas and comedies, we can perceive the idea the members of a society form of it and the ideal it suggests to them. No one could deny what art has been able to do, from this point of view, for the defence and illustration of national values. But that which constitutes the sense and the proper value of scientific truths is that they are opposed, in this, to all other values. Scientific truths are, by definition, universal, demonstrable to

all, verifiable by all: and as they do not reflect the temperament of any country, they are not to be stopped by any frontier.

Doubtless, national genius puts its imprint even on the work of intellectual research. Special predilections and aptitudes are manifested. Neither demonstrations nor verifications are made in exactly the same fashion on both sides of the Channel. In certain countries, the experimentalists dominate, in others, the geometricians. The diversifying influence of language succeeds in making itself felt even on the ground of scientific conquests. Thus interpreted, Pasteur's phrase rings true, "The scientist has a country." But he prefaced this remark by saying, "Science has no country," by which he meant that no boundary can arrest the expansion of acquired verities and that no consideration should arrest the effort of the mind to acquire them. If the scientist, when he undertakes the work of research, becomes conscious of the spontaneous preferences the temperament of his group would suggest to him, he will endeavor to guard against them as against all *a priori* preferences. Scientific thought is modeled on nature only when it is ready to detach itself from the national body. "I write even for the Turk," said Descartes. He thus reminded his readers that in matters of science proper it is contradictory to couple truth and nation. Whether

geometry or chemistry, astronomy or biology is in question, a proposition is scientific only if its principle is valuable for all human minds.

This means that it is necessary to maintain the distinction between the collective and the universal. When it has been demonstrated that an idea has a collective form, it has not yet been demonstrated that it possesses universal value. *The collective is an intermediary between the individual and the universal.* The group, in dominating our intellectual life, imposes on us ways of thinking which are not peculiarly our own but peculiarly its own. It gives us the incentive to go beyond ourselves. But if other influences did not enter in, our horizon would be very restricted. The consecrated beliefs of a group are the closed lake: the universal truths of science are the open sea. From the lake to the sea, what river will conduct us?

Various conditions of a social nature aid, doubtless, in enlarging the intellectual horizon and preparing for the liberation of reason. In the first place, all that works spontaneously to limit the power of religion works to this end. However all-pervading primitive mysticism may be in human societies, it soon encounters reductives of various origins. Human societies cannot become complicated and developed without the appearance of centers of in-

terest and also centers of power over which the guardians of religion find it difficult to exercise an absolute control. "The first king was a successful soldier," said Voltaire. We no longer conceive things so simply to-day. There is some mysterious prestige at the very root of the royal power. To the question "Who was the first king?" Frazer would unhesitatingly reply, "A clever magician." This does not prevent the king, once enthroned, even if he remains priest or magician after a fashion, from seeing things with a new eye. He has an armed force to organize, lands to unite, populations to govern. He puts himself at a political point of view which does not always coincide with the religious. Certainly the *imperium* often remains in coalition with the *sacerdotium* but not without claiming a growing measure of autonomy for the governing of all sorts of temporal interests. Thus values arise in the political field which the temples cannot entirely overshadow.

What shall we say, then, of those which come into being on the market under the influence of the economic life? Every one knows the transformations which the market, inviting the assembled traders to forget their differences of origin, brings about in legal rulings. But does it not act on beliefs, themselves? Does it not naturally tend to diminish their empire? Regard for the economic

interests at stake tends to create a movement of autonomous ideas. The holders of the wealth which is brought into being in the shelter of these conventions become conscious of the new power it puts in their hands. And soon they take it upon themselves to judge from their point of view which is as distinct from that of the kings as it is from that of the priests. It is thus that Auguste Comte, in the treatise he wrote at the time when he collaborated with Saint-Simon—the *Sommaire appréciation de l'ensemble du passé moderne*—explains the double movement in inverse directions which seemed to him characteristic of our civilization, namely the decline of the Catholic-feudal power and the rise of the free cities. "Industrial capacity," claiming its right to a place in the sun and exacting a political power proportionate to its economic power was the principal force which made the old régime give way.

Nothing appears more probable to those who remember that the very multiplicity of principles opens up possibilities of emancipation, than that these systems of laic authority, whether of political or economic origin, should serve the cause of liberty and consequently that of reason when they limit the sway of religious authority. Guizot remarks that if Occidental civilization is more liberal than all others it is just because it is less dominated by a single principle. Where authority is divided, where the

centers of attraction and repression, of interests and forces are multiple, where values are differentiated, the proper value of reason has more chances of making itself recognized.

These chances, moreover, are augmented by the mere fact that contacts between groups are multiplied and that currents of international life are established. To estimate the worth of this new fact, it is necessary to recall that, after all, there is room to distinguish between *civilization* and society.

It is the movement of civilization in general which has most frequently held the attention of the founders of sociology. Auguste Comte is less interested in societies in their typical forms than in humanity making its way supported by science. Comte's successors, in order to render their ideas precise, have sought to make their investigations specific. And first they have turned the light on the social substrata of different types, through the functioning of which, law, morals and beliefs are organized. They have bound up collective representations, themselves, with definite social forms. Does this mean that these representations are subject only to those influences which emanate from the closed group, clan, city or nation? We perceive, rather, that, even as early as the primitive phase, there is hardly

a group which is strictly closed. Civilizations overflow the group frontiers. Ideas as well as techniques have no definite limits to their areas of expansion. Pilgrims and merchants carry something new to the foreign country and bring something new back from it. Thus, as Durkheim, himself, was led to establish, a moral atmosphere is formed which constitutes a civilization of which each national culture is only a particular form. "There is no national life which is not dominated by a collective life of an international nature."

It is easy to divine how this domination can aid in the generalization of ideas. Commerce between groups leads to the detaching of the gods, themselves, from their groups, and renders possible a super-national religion. When Rome sees "peregrines" from all the countries of the world living together inside its walls, and enters into regular relations with all sorts of cities, it elaborates a Law which spreads beyond the city. A rational and human Law appears as an ideal. Wherever people, who were yesterday strangers and matters of wonderment to each other, have occasion, as Montaigne puts it, to sharpen their wits by trying them out on each other, the authority of imperative and exclusive beliefs is, in every way, shaken, and the liberation of reason is prepared for.

Does not the privileged case of ancient Greece permit us to verify these theses? The whole world has repeated, over and over, that it was the cradle of reason, that on those happy shores humanity learned to think for itself and to elaborate the first model of a positive science. This science was undoubtedly in a general way much more rational than experimental. In spite of the observations incorporated in their theories, the Greek thinkers seem more apt at logical demonstration than at experimental verification. In any case, intellectual curiosity becomes with them a master passion. They desire knowledge for its own sake. They wish to comprehend through the sole power of the human intelligence. And they put aside all obstacles —practical cares or religious reverences—that threaten to arrest its free inquiry. It is in this spirit that they add to the knowledge, mathematical, geometrical, astronomical, bequeathed them by Oriental civilization: and it is by this spirit that they make the legacy fruitful. We have found that what the Chaldeans and Egyptians had amassed in the way of science was, for the most part, of the nature of practical rules and observations of fact. The explanatory theory which orders ideas and constructs a body of science was lacking. They were content with myths. The Greek reason is more audacious and, by that very fact, more fecund.

It has long been remarked that the Greek conception of religion lent itself better than all others to this liberation. Its esthetic anthropomorphism ennobled instead of depreciating human nature. The gods of Hellas are only deified men, not formless and redoubtable monsters. Face to face with this Pantheon, wherein it recognizes itself, the Greek mind remains free and serene.

Moreover, as Renouvier remarks, there is no more place in Greece for a dominating priesthood than for an absorbing religion. The sacerdotal functions are not reserved for a haughty caste. The head of the family exercises them at home. And as for public rites, many of them are led by representatives of the city, either elected or drawn by lot. For beliefs there is formed no special corps of guardians who would erect them into dogmas. While mythology abounds, orthodoxy is quasi-unknown. If people are required not to fail in the observances of worship, at least they are left as free as possible to believe, reflect, search at their pleasure.

It has many times been noted that, for a first set of acquired truths, temples present great advantages. Therein men find the leisure and develop the inclination for observing phenomena. They take pleasure in keeping records. Thus were conserved the first notations of the Chaldean or Babylonian astrologers. Similarly, Aristotle explains the Egyp-

tians' advance in geometry by their sacerdotal organization. But that which is useful in the beginning often becomes an obstacle later on. There comes a time when the more of what is old the priesthood has to conserve, the less of what is new it is able to discover. The spirit must breathe from elsewhere and research must be established in the open. According to Gomperz, we must admire, on this point, the double privilege of Greece: "By a special favor, the Greek people had predecessors who possessed bodies of priests but, itself, has always lacked them." Therefore they were able to take up the heritage of the Babylonians and Egyptians without being stopped by the sacred boundaries which stopped these latter. Furthermore, the very structure of the Hellenic world and the movement which animates it is especially favorable to free inquiry. Greece never succeeds in constituting a veritable nation. It forms, however, a pleiad of cities, mostly maritime, between which there is a constant exchange of commodities and ideas. The real center of Greece is in the sea, in the midst of that swarm of colonies where the most adventurous spirits seek their fortune, where prejudices are shaken off sooner than elsewhere, where men from almost every race encounter and have dealings with each other. There, the contributions from three continents are brewed together. There, the fric-

tions which prevent stagnation are multiplied. There, then, the first schools of free inquirers, from Thales of Miletus to Democritus of Abdera, which are entirely different from the hierarchized sacerdotal corporations, inevitably arise more easily than elsewhere.

In the sort of testimonial he made for himself, wherein he affirms his superiority as a geometrician over the Egyptian surveyors, Democritus begins thus, "I have traveled more than any other man in the world,"—as though he took into account the help that contact with heterogeneous traditions must bring to the budding scientific spirit. We are agreed that intense international life assists the liberation of the intellectual life. Nowhere has this condition been more fully realized than in ancient Hellas. And this is, perhaps, one of the reasons which contribute toward explaining the "Greek miracle."

Why did this splendid fire not last? Why, when so many sciences, from astronomy to medicine, from geometry to sociology, had their beginning in Greek antiquity, have we not seen their progress accelerated as we could have expected? Various reasons can be found for this. In the first place, admirable as the Greeks are as initiators, they seem to lack talent for organization. For science to make continuous progress, it should, at least after a certain point, become a collective and concerted perform-

ance. Work should be divided, experiments should be multiplied and act as checks for each other. Renouvier speaks somewhere of the sort of spontaneous association which, in modern times, is formed among scientists, permitting community and continuity of research. The Greeks did not know how to compass this. And, moreover, any organization was hindered by the disturbances of all sorts which the Hellenic world underwent. After the Macedonian conquest came the Roman domination, then the accession of Christianity. It had, indeed, more than its share of revolutions whose chief disadvantage is, according to Milhaud, that they make practical problems, political, moral or religious, pass to the foreground; thus paralyzing the disinterested enthusiasm necessary to discovery.

There was, in particular, what might be called an offensive return of mysticism from which rationalism could not but suffer. Hadrian's reflection when he revisited Alexandria in the second century is well known. The city of the famous library which was an attempt to concentrate all the scientific riches of the world, the city which knew Euclid, Hipparchus, Posidonios, had become the center of all Oriental superstitions. No longer was any interest taken in precise investigations on matter or numbers. The *Beyond* had begun to absorb all minds.

It goes without saying that Christianity must be

held particularly responsible for this absorption. It preached contempt, not only for the goods of this world, but for natural laws as well. It demanded love and faith, not science, and still less the critical spirit. It has been observed, however, that the revolution it forced on minds did not pass without serving, indirectly, the cause of science. In particular, it seems to have given the world that which the Greeks, reasoners above all, had not attained at the first stroke, the liking for experimental truths.

However, to demonstrate this thesis, arguments very different if not contradictory are employed. For Dubois-Reymond if "Modern science owes its origin to Christianity," it is because monotheism introduced the idea of an absolute truth to which one must be ready to sacrifice everything, an idea of "terrifying gravity" which necessarily rendered impossible those "charming conversations about apparent probabilities" in which the Greeks delighted. On the contrary, for Egger—whose observations Renouvier seems to adopt—Christianity, in reserving to faith the absolute, the only really explanatory truths, renders the scientific spirit more modest. It will be prepared, in the order of sensible phenomena, to note without understanding, to experiment on nature without desiring it to be all transparent. And such humility is the prime condition for new conquests.

Whatever may be the services the Christian conception of nature has been able to render through this détour of experimental science, one thing is certain, namely, that a new form of religion, proselytizing and dogmatic, presents grave danger for free scientific inquiry.

Christianity soon succeeds in creating for itself the organs which were lacking to the religion of ancient Greece. A hierarchical priesthood works to establish orthodoxy and transform myths into dogmas. The new religion overflows the frontiers of states, but not without trying to put their force at its service. It is possessed by an ambition which did not animate the religions of antiquity. These latter usually remained national. Each attached to a group, serving its particular ideal, helping to defend its integrity, they did not seek to recruit, from outside, foreign adherents. Other cities, other beliefs. Diversity appeared natural and legitimate. Christ, on the contrary, is come to bring good tidings to all the world. Under whatever sky, of whatever race, to whatever state they may appertain, his apostles wish to save souls. From this arises an incomparable glow of fraternity. But there arise, also, terrible risks of intolerance. Proselytism easily becomes imperialistic. A faith sure of its universal value seeks means of forcing itself

on the world. Thus the clouds gather and liberty is greatly menaced.

Certainly Greek antiquity, wherein we have saluted the abode of free minds, was not ignorant of intolerance. The death of Socrates is the most tragic proof of this. But, even when the ancient city persecutes, its intolerance is more political than religious. Its chief demand is for an exterior conformity. It leaves beliefs, themselves, relatively free. On the contrary, it is on the inner life of the spirit that Christianity, become the state religion, wishes to act. It is faith that saves; and since faith assures eternal well-being, every one must be made to believe, by persuasion or by force. This leads to the hunting down of doctrines that are contrary to the consecrated dogmas, and of methods that are dangerous to docile faith. Intolerance becomes so much the more redoubtable in that it appears, to those who practice it, a higher form of charity.

It goes without saying that numerous questions remain open and numerous inquiries lawful outside the verities necessary to salvation. A distinction is made between the orders of truths, and liberty profits by this distinction. To realize, however, with what weight the system presses on the whole of thought, we have only to recall what science was in the heyday of scholasticism. There, they fight

each other with texts supported by many a syllogism. Reason, in the zest of arguing, gives itself up to all sorts of acrobatic exercises but the "authorities" furnish its premises. Nature is the last thing to be considered. And there is certainly nothing to warrant the idea that the "age of faith" showed itself especially favorable to the employment of the experimental method.

In reality, for science to make progress in all its branches, for nature to be methodically besieged, for the value of the conquering reason to be recognized, there must be new social transformations permitting a return to the tradition of free thought which the Greeks inaugurated. There must be a veritable renaissance of reason.

CHAPTER XI

SCIENCE AND INDUSTRY

Science has gained, in our societies, a prestige which nothing that existed in primitive societies could have made foreseen. It has become a respected power. There is not an Occidental government, whatever may be its preferences in methods of authority, that is not obliged by public opinion to recognize that society has need of men of science, and that it owes them not only the material means but the full intellectual liberty necessary to their investigations. Laboratories and libraries have become, in their turn, sacred sanctuaries. Science has decidedly advanced to the first rank in the table of values.

How can this ascension be explained? The most evident reasons for it are the economic. Dubois-Reymond, in his studies on the history of civilization and science, proposes calling our age, in opposition to classic antiquity, *the age of induction and industry*. Lecky, in his work on the growth and influence of rationalism in Europe, devotes a chapter to what he calls *the industrial history of rationalism*. The two authors remind us that if reason, in our world, has

become independent and conquering, it is due, in large measure, to the solidarity which has been manifested between its cause and the cause of economic progress, to the incessant exchange of actions and reactions we have been able to discover between the two characteristic powers of the Occidental world.

We are well aware what transformations of all sorts the perfectioning of the methods used for the exploitation of the globe has imposed on modern societies. The Saint-Simonians were the first to sketch this picture. Historic materialism has made it popular. What has not always been enough noticed is that the explanation of these very perfectionings presupposes, at the beginning, the putting to work of forces which have nothing of the specifically material since they are those of the mind in quest of truth. Discoveries open royal roads to great industries. When commerce has extended immeasurably the radius of its exchanges, when it is no longer willing to produce merely for the family or the city or even the nation, but for an indefinite connection dispersed throughout the vast world, there is need not only of more numerous workers in the factories; there is need of machines; there is need of motors; there is need of a complex ensemble of transforming apparatuses which permit the utilizing of the disciplined forces of nature.

A deeper knowledge of nature is the condition of this new organization. The delvings of science make possible the flight of industry. Thus, the movements of this latter are led, its rhythm accelerated by ideas. On this point Marx has need of Comte, and materialistic philosophy links up with the intellectualistic philosophy of history.

In any case, if we are going to make clear the relations of the two systems of values, science and industry, we must distinguish the phases. We must, also, take into account the fact that industry is far from being entirely passive toward science. For a long time this latter receives at least as much as it gives.

It would be a mistake to try wholly to identify technique and science. There are all sorts of traditions and also all sorts of inventions which, without being properly scientific, contribute toward maintaining or perfecting men's means of action. In the *Mémoires d'un Compagnon,* Agricol Perdiguier protests energetically against the idea that the life of arts and crafts is dependent on science alone. Himself professor of draughtmanship, he reminds us that a sort of empirical and practical geometry is handed down in the memorandum books of corporations. Berthelot long since showed how, through manufacturers' secrets, through trade manuals—the

Formulas for Dyeing or the *Key to Painting* for example—a whole treasure of chemical receipts has succeeded in passing from antiquity to modern times. What this tradition lacks to constitute a body of science is the effort to discover central truths around which to coördinate the rest, in other words, regard for theory. But the receipts are not lacking in observations which are useful even to science, and the ambition to modify matter, ambition which the desire for wealth and power has overexcited, develops just the inclination which was most lacking to the science of antiquity, and which was to be so fruitful for the modern, the taste for experimentation.

In this influence of the practical on thought, Weber sees the principal difference between the Greek spirit and the modern; the latter being chiefly practical, the former theoretical. "Science, instead of being fused with philosophy, tears itself away from tradition, from scholasticism and verbalism, only thanks to the practical inventions which arise and are developed in quite other atmospheres, in the workshop of the mechanic or the military engineer, in the industrial corporation, in the apothecary's shop, the alchemist's laboratory, the consulting room of the astrologer or the doctor."

It cannot be doubted that many facts fit in with this pragmatic theory. Take, for example, the

services rendered scientific research by industrial machinery. Numberless discoveries have had to wait for the instrument of precision which would make them possible. More powerful telescopes have permitted the rectifying of the errors of ancient astronomy. Without the spectroscope, could one think of making out the constitution of the stars?

But it goes further. The empirical discoveries of technicians suggest solutions to scientists, set them problems, orientate and stimulate their inquiries. A Vaucanson, a Papin, an Arkwright, even though they may not be capable of working out the theory of their discoveries, open up perspectives to science as well as to industry.

Mantoux, studying the industrial revolution in England, shows us that at first all is empiricism and groping. Whether in the textile or metallurgical industries a spontaneous movement precedes the reflective; economic necessities provoke spontaneous efforts on the part of the people belonging to the trade. And it is their discoveries which transform the conditions of production. A John Kay, a J. Wyatt are not in the least men of science. However, the one invents the flying-shuttle which permits the faster weaving of wider pieces, the other the spinning machine which makes possible a response to the increased demands of weaving. In the same way, the insufficiency of iron production in England,

the high prices Sweden demanded for it, stimulated the ingenuity of the Dudleys, the Darbys, the Corts: pit-coal was used in blast furnaces, puddling was discovered.

Such inventions do not fail to awaken much scientific curiosity. People realize that industry will be better served by increased and better ordered knowledge. Societies are founded which take for their task the bringing together of the factory and the laboratory. The College of Arts and Science founded at Manchester, in the center of the cotton industry, hears Dalton expound the law of multiple proportions to which his investigations have led him. At the Royal Institution of London, which Remford helps organize, Young expounds his theories about light, Davy his discoveries in electro-chemistry.

Élie Halévy, who points out this increase of investigations on the ground worked and re-worked by industry, comes to the conclusion that the thesis of historical materialism is true, at least in England at the beginning of the nineteenth century: "Scientific theory takes its rise in practical industry."

But can the observation be generalized? And are we going to take sides not only with historical materialism but with pragmatism, in concluding that always and everywhere, the idea which science demonstrates or verifies springs from the need felt, the action attempted? This conclusion would be

far from fitting all the facts. We said that it would be necessary to distinguish phases in the history of the relations between science and industry. Industry cannot arrive at the phase of accelerated progress which is its characteristic in the modern epoch without the existence of an organized and autonomous science. Industry cannot become an ever-widening stream unless springs of pure ideas continue to gush forth on the heights.

To make this clear we need only to represent to ourselves the enormous use modern industry makes of theoretical science. "What builder of steam boilers," demands H. Le Châtelier, "could do without the laws of the tension of water vapor investigated by Regnault?" What maker of optical instruments does not profit by the researches which have shown how the index of refraction varies in function of the length of the light wave and the chemical composition? How could any one put together a telegraph without knowing the electromagnetic laws discovered by Ampère?

The remarkable fact is that the greater number of these investigations or calculations which admit of so many applications have been carried out quite disinterestedly without regard for these possible applications. Was Descartes, when he studied the laws of refraction, thinking of the manufacturing of telescopes, opera glasses or microscopes? Did

Newton, formulating the laws of gravitation, have in mind the navigators, straying from their course at night, who would be saved by the results of his discoveries? He keeps his eye on the objective of his telescope. He serves terrestrial interests without having willed it.

A Torricelli, a Pascal, by their researches on the vacuum and the weight of air, prepare, without suspecting it, the way to a Papin. The steam engine is, at first, an atmospherical machine, and it is to make a vacuum under the piston that the condensation of steam is utilized.

In such matters, the unexpected is the rule. The inventor of a theory would, nearly always, be incapable of measuring the practical consequences it entails. And, for it to carry all its consequences, it is better that he should not, himself, be preoccupied with them. Let the demon of pure curiosity goad him and drag him toward unexplored regions. Let the Chase of Pan, as Bacon said, be carried on methodically in all forests. A prodigal idealism reveals itself more enriching, in the long run, than a short-sighted utilitarianism.

To bring out this truth, Sageret, speaking in the name of the General Confederation of Intellectual Workers, asks us to imagine a committee called together, in the seventeenth century, to consider the perfecting of means of transport. What ought they,

naturally, to consider? The breeding of horses, the improvement of vehicles, the maintenance of good highways. If any one had said, "Concern yourselves, rather, with the effect of acidulated water on couples of different metals," he would have been treated as a fool. Nevertheless, this fool would have been in the right against all the wise men. It is the electric current which has wrought the greatest revolution in transportation.

What conclusions do these remarks force upon us? They bring home the necessity of loving reason for itself and being ready to defend its free exercise against all attractions as against all pressures: against the attraction of industrial interests, to-day, as formerly against the pressure of religious beliefs. G. Milhaud, drawing a "condition of scientific progress" from the study of Greek geometry, warns us that this progress depends "less on external stimuli than on the facility with which thought can shut itself away from the exterior world and abandon itself to the seductions of pure theory." To-day, more than ever, it is necessary to remember this warning. Positivism has been justly reproached with having wished to stop, at a given moment, the flight of science. Did not Auguste Comte seem to say to astronomy and biology, "Thou shalt go no farther"? In such haste was he to

erect a new faith on a foundation of immutable truths. Industrialism would be not less dangerous than positivism if it should recognize only a "science which pays," and if it should subordinate, to the sole regard for material production, the organization of all our grades of teaching. Let us save Minerva from Vulcan by calling to mind that reason is conquering only on the condition of being absolutely independent; and let us treat it as an end in itself if we would see it continue to play the rôle of a universal means.

A day will doubtless come when the people, themselves, will feel the worth of this superior value. To-day, the various groups, syndicalist or coöperative, which they found like to take their stand on the ground of economic "realities." And the tendency is only too natural. But the very enlargening of their experiences will lead syndicalists or coöperators to realize that, of all the forces which struggle to transform the world, free scientific research remains, perhaps, the most powerful.

A day will doubtless come when the various organs of industrial democracy will vie with each other in putting the necessary resources at the disposition of pure science: having found that liberty of the mind is humanity's greatest wealth.

CHAPTER XII

SCIENCE AND MORALITY

Is it only in the field of industry that science can make its fruitfulness seen? Is free research found to serve only the economic life? Can not relations be established between truth-value and other types of differentiated values?

In order to reply to these questions, it would be necessary to seek on what grounds the prestige of science really rests in the public mind of to-day. It would readily be perceived that these grounds have widely differing origins. The transformations which the discoveries of savants imprint on *things* are, it is said, the most striking for the masses. The earth, brought under control, bears witness to the glory of science. But it is not for these triumphs, alone, that it is honored. Even among the masses, another sentiment comes to light. To reasons of the economic order, they willingly add reasons of the political order. They thank science for having aided them to emancipate themselves, and for having thereby opened up the way not only for the progress of industry but for that of democracy.

Science cannot multiply its conquests, without reason affirming its independence. From the moment when its proper work of demonstration or verification commences, this latter no longer recognizes dogma, it forbids itself all reverence. It is not surprising that the generalization of such a state of mind should appear a danger to authoritarian régimes, to what Chateaubriand calls "the governments of adoration, of cult and of mystery." There is cause for this fear, inasmuch as it is usually the case that the respect for institutions demanded of a people is bound up with a certain number of traditions presented as unchallengeable verities. For example, the monarchical institution has been supported on Catholic dogmas. The day, wherein, on one point or another—for example the question of the relation of the sun to the earth, or the origin of species—these dogmas are found to be contradicted by the discoveries or the theories of science, the political edifice, itself, is shaken. The menaced belief compromises the régime it upheld. The fall of prejudice announces and entails the fall of privilege.

To destroy prejudice in order to destroy privilege was, in fact, the central program of French philosophy in the eighteenth century. This philosophy was not in the least, as it has too often been called, an entirely *a priori* philosophy, contenting itself with

evoking abstractions to justify the claims of the right. In fact, in the eighteenth century, scientific inquiry becomes a collective work in which all enlightened opinion is interested. In botany as in astronomy, in physics as in chemistry, the rapidly multiplying discoveries are followed with passionate interest. The *Encyclopédie* aims at being, first and foremost, a work of science, inventory of acquired knowledge and program for research. But this scientific work was, at the same time, in the opinion of its authors, a practical work. Through knowing nature better, they thought to aid society to liberate itself.

Believers in democracy have kept this feeling of the solidarity between the cause of science and that of liberty, between the forces of discovery and those of emancipation, more or less clear, all through the nineteenth century. And this is why they have easily pardoned even those thinkers who deal very severely with democracy if only their work is permeated with the love of science. People are often astonished that such men as Gambetta or Ferry should have cited Comte as an authority. It cannot be denied that the founder of positivism, who remains Catholic in temperament, is very hard on the philosophy of the Rights of Man which he considers negative and destructive. But, though he wishes above all to reorganize and, as a step toward reorganization, to

unify ideas through feelings; even though he reveals an ambition to resuscitate dogmas and cults; at least Comte would always ask his directions of science. And that is enough to let him continue to be classed among the emancipators. So true is it that, for the majority of the partisans of democracy, science appears the dreamed-of guide. It has beaten down the walls. It has cleared the brambles from the way. Let people but be inspired by its spirit, let them but spread abroad its benefits, and civilization will continue its progress. And this applies not only to material civilization but to moral civilization as well. Thus, the value of science would tend to become the central value in the world of modern values. Giving warmth as well as light to all the others, moral values included, it would give unhoped-for unity to the whole.

Must we say of this great hope which was the bread of life to so many "children of the new times," in the nineteenth century, that it has ended in a great disappointment? Such, precisely, was the thesis of those who proclaimed the bankruptcy of science. This latter, they say, was believed capable not only of ordering things but of regenerating souls. From its triumph was expected the highest possible degree not only of happiness but of morality. People were convinced that it would

bring about "the blessed times of equality and fraternity."

But this was to mix categories. It was to confuse the series of values. Let science reign in its domain, we are told, but let it recognize its boundaries. Not only do there exist numerous questions, and these of the most acute—those which bear upon principles, beginnings and ends—that it would not be able to solve by its methods; but its truths are certain only on condition of remaining relative; and, still more, it carries within it nothing either to orientate or stimulate that moral activity of which societies, more than ever, have need.

To look well into the matter, the scientific spirit, if it were left master of souls, might be more dangerous than useful to the moral life.

Descartes is praised for having been a fearless doubter, for having invited us to seek the truth for ourselves. This is surely an imprudent exaltation of individual judgment. Is it not self-evident that a society wherein each one was intoxicated with the Cartesian pride would soon be wholly lacking in the indispensable principles of cohesion? Where nothing is respected in common and everything is constantly called into question, the unanimity which supports the social life crumbles into dust. To spontaneous communion succeeds mutual distrust or —still worse—egotistical indifference. Each think-

ing for himself soon becomes each living for himself.

Furthermore, if we examine in his inner life, face to face with himself, the man brought up in the spirit of criticism, the spectacle is not less disheartening. Indeed, if a man wishes always to wait for the evidence before making his decisions, it is to be feared that he will lose the very habit of making up his mind. He will spend all his strength in the balancings of reflection. The hypertrophy of reason entails a correspondent atrophy of the will. Thus, the critical spirit is a dissolvent for individual energy as well as for social synergy. Such is the punishment of those who, through too great regard for clear and distinct ideas, ignore the obscure and fecund forces of feeling. They forget that the great things are accomplished in the penumbra. The cold light of their reason arrests life.

This charge, as may well be believed, has not gone unchallenged. College faculties, in particular, have endeavored to maintain that in teaching science and the scientific spirit, they usefully prepare minds for the moral life. Instruction, rightly understood, is of itself an education. The critical spirit does not logically engender either inertia in the individual or anarchy in society.

To science which divides and dissolves are opposed religious beliefs which rally and bring under

rules. It is possible that the investment of nature by science renders certain beliefs daily more untenable. But it is necessary, in the first place, to recollect that many beliefs divide at least as much as they unite and set the members of a same nation against one another. Whenever such dogmatisms have to be definitely abandoned humanity can assuredly only gain thereby. It must be added that, in place of these traditional "truths" science installs positive truths, day by day more numerous and better coördinated, and upon which men of good faith and good will can easily build together. Moreover, while they would continue to have differences of opinion on many points, science itself demands that they tolerate these differences. It aims at presenting these acquisitions only as provisional, and desires that their claims should be submitted to perpetual revision. It has need, to live and progress, of abounding light and the free air, that is to say, free universal examination. It tends, then, to impress men with the habit of methodical toleration. In any case, observes Lapie, by the mere fact that it makes them accustomed to have regard for proof, it cuts short many rash judgments, many hasty imputations or ill-founded generalizations which sow nothing but hatred. If the spirit of criticism, in the worldly sense, is father of the raillery which divides souls, the critical spirit, in the

scientific sense, fathers the indulgence which draws them together.

Moreover, individual inertia could no more be legitimately imputed to it than could social anarchy. In the first place, it must be remembered that initiative is only another name for the critical spirit. One innovates always against some tradition from which it has become necessary to be freed. If new truths are discovered, if usages and customs are ameliorated it is because there have been found men vigorous enough to think for themselves. It cannot be denied that thought often arrests or at least retards, or as we say, "inhibits," action. But in the majority of cases this is matter for congratulation. There are times when a little hesitation before the deed, the need to see clearly before acting, would not come amiss. In any event, these comings and goings of thought are necessary in order that there may be substituted, for the instinctive or impulsive activity which leaves us at the level of animals, that reflective activity which makes us men. Without intellectual deliberation there is no truly voluntary act; and without voluntary act there is no veritable personality.

Should any one wish to form an idea of the moral profundity to which scientific culture can attain, let

him address himself to the analyses of a mathematician like Poincaré or a scholar like Gaston Paris; he will see what a harvest of virtues they glean in the footsteps of science. "Intellectual habits," remarks H. Poincaré, "have also their moral resonance." The splendid harmony of natural laws procures us joys wherein we forget ourselves. They will not, however, reveal themselves save to him who has taken for his rule sincerity, impartiality, disinterestedness. The servant of truth is also the servant of humanity.

Self-distrust, says the scholar, for his part, the effort not to yield to the suggestions of feeling or the illusions of form, the desire to insert the result of our labor in a collective work are so many habits which science imposes on us and from which the conscience profits. "The man who has, even in what concerns the smallest things, a horror of deceit and even of dissimulation, is by that very fact removed from most of the vices and prepared for all the virtues."

Let them, then, stop telling us that science withers and relaxes and dissolves. In reality, the progress of the scientific spirit is accompanied by certain states of feeling which are most favorable to the development of the moral will. It harmonizes the soul to the profit of its noble elements. It de-

taches us from ourselves and attaches us to great causes. It makes us love the highest spiritual life and, at the same stroke, the largest social life.

What is this to say, if not that we encounter, here, a particularly precious conjunction of values? It is, also, a conjunction which implies a preliminary dissociation. For the scientific spirit does not bear all the promised fruits of morality except on the condition of blossoming in perfect liberty. Morality appears here, to adopt and transpose Aristotle's phrase, as one of the flowers of science. This latter must have been cultivated for itself in all sincerity, in perfect disinterestedness; then there are harvested, as by supererogation, all sorts of virtues useful to society.

Does this mean that society, in order to obtain all the values of which it has need, could content itself with this precept, "Cultivate science, spread abroad the scientific spirit"? Must we believe, to borrow Belot's expressions, that the *will to truth,* natural acolyte of scientific reason, is sufficient to re-create perpetually the *will to society?*

This exaggeration is the opposite of that to which the pragmatists have accustomed us; but it is still exaggeration. We must be on our guard here against a too natural reaction. The scientific spirit has long been held poisonous to all morality, which

is, perhaps, a reason for our being tempted to see in it, as a sort of revenge, the remedy for all vices. Add that for him who teaches, it is the remedy which lies right at hand. How could the professor help being tempted to extol instruction as educating? It is through instruction that he acts most conveniently on minds. Specially prepared to distribute light, it pleases him to think that the light transforms itself spontaneously into heat and this latter into moral movement.

Natural as this professional preference may be, it must not make us forget the diversity of the exigencies of the moral life, nor the diversity of the means this latter can put to profit. Would an entirely intellectualistic education give societies the collaborators of whom they have need? As a matter of fact, history has not, up to the present, made us acquainted with any society which addressed itself solely to the individuals' reason. It is always through the medium of beliefs, feelings, judgments of value, clearly distinct from the judgments of reality with which science is satisfied, that societies initiate the newcomers.

Some will say that this was because the hour of social science had not yet struck, because the objective research which has succeeded when applied to nature had not been extended to human groups. Let societies be observed as things, let the laws of their

structure and evolution be worked out by comparative inquiries; then, perhaps, it will be possible to determine scientifically the sort of morality suitable for a given society.

Let us, for the moment, admit that this determination is possible and does not imply other judgments than judgments of reality. This would not prove that science alone, in our time, would suffice for social initiation. What ends impose themselves on our society, a scientific research will certainly aid us to determine. But, once determined, can we not and must we not employ other means than scientific culture in order to attain them? This is another question.

Perhaps this question may be solved by history itself. Is it not becoming manifest that the scientific spirit, in the phase of evolution at which we have arrived, takes increasing control over social organization? Reason, made strong by the conquests of science, admits with ever greater difficulty the various prestiges which prevent freedom to discuss, without regard for anything but truth and justice, the conditions of their collaboration. Apply to social problems the same critical spirit you have applied to the problems set by nature; you are logically led, according to Belot, to a contractualist régime which permits individuals to compare their claims, to measure their contributions, to equalize

their rights. Juridical rationalism would then be, as it were, a transplanting of the scientific spirit into the social order.

We have not the least idea of denying that the progress of the sciences, augmenting reason's confidence in itself, has contributed to render it bolder, more enterprising, more exacting in social matters. But we would not be disposed to grant that this progress alone accounts for the apparition of those values which have commanded and still command so many transformations in our political or economic organization.

"Let work no longer be treated as merchandise," "Let man no longer be treated as a thing," ideals such as these are syntheses: they have been brought to the foreground of the collective consciousness by all sorts of diverse forces. Among these forces, Christian tradition has played its rôle as well as the free philosophy of the eighteenth century. The reason which proclaims these values superior bears within it the legacy of religions along with the conquests of science. It translates the aspirations of the people no less than the reflection of the intellectuals. Moreover, in order that the principles which it proclaims may be at the same time motives for action, in order that they may have propulsive force, it is certainly necessary that there should be mingled with them those collective feelings whose influence

science, properly so called, has to put aside when engaged in some work of demonstration or verification.

Does one wish to measure to what point such feelings are necessary to stimulate action; let him analyze more closely the state of mind of those very people who propose the cult of science as the center of the moral life. It is indeed a cult and one for which there is an effort to arouse the forces of enthusiasm. "The enthusiasm of the savant," writes Croiset, "cedes nothing to that of the poet. What is there more beautiful than the spectacle of the victories of the intelligence in this world, from primitive barbarism up to our civilization, so imperfect still but so prodigiously superior to the miserable beginnings of our species?" The hymns of Renan and Berthelot to the future of science show the same tactics. Therein we find invoked, under various forms, the great social interests of which science is the best servant; beyond libraries and laboratories, the savant shows the infinite multitude of men whom science saves from plagues of all sorts which have been unchained on them either by blind nature or blinded imaginations. By these perspectives, he thinks to awaken sentiments of respect and zeal from which science itself will profit. He counts on the capacity of souls to respond; he does not address himself to pure reason.

How much more is this the case when an ideal like democracy is in question, and when it is desired to attach men no longer only to the cause of science but to that of human right. Here, especially, it is important that to the will for truth should be added the weight of numerous aspirations which are far from being all born of scientific research.

These are aspirations, however, which we can legitimately qualify as rational. They aim at establishing an order in whose making free minds seeking an acceptable equilibrium have coöperated, a social order which can be approved by reason. But we must add that the reason spoken of here as guide of social evolution, will to working harmony and center of coördination of judgments of value, is something singularly richer and more flexible than the reason of which the scientist makes use when he demonstrates or verifies and accomplishes the voluntarily limited work of science.

CHAPTER XIII

ESTHETIC VALUES

Science and industry, each helping the other, have succeeded in taking a central position in our societies. They play a dominating rôle therein, and most values seem to gravitate around these two linked powers. This does not say, however, that they eclipse the rest. Art, in particular, maintains its claims and wishes to make itself, also, a center capable of making the desires of men converge and of exerting its influence on their attitude toward life. We try to keep a large place for it in our curriculum. The cultivation of taste, under its varying forms, is one of the preoccupations of educators, even in the primary schools. It seems to be generally admitted that the progress of democracy demands that esthetic enjoyments should be put within the reach of the greatest number. They should always fulfill the functions of higher "socialization"; they should always be a stimulant or an indispensable consolation to the moral life.

In order to understand the meaning of these desires and the scope of these efforts, it would be well,

perhaps, to define exactly the place esthetic values occupy in the system of values, and discover in what measure those tendencies toward differentiation or conjunction which we have striven to make clear are verified in matters of art.

Art is often presented as the creator of ideal values *par excellence*. For it seems to be in its works that value can most clearly be seen as an end in itself. Certainly, all the sorts of values that we have distinguished can claim that they are the object of human desire and are appreciated for their own sakes independent of the various ends they may serve. Money is the classic example which proves, well enough, that a means may be loved for itself. And scientific truth or moral virtues easily become, with greater reason, the object of a real cult which scorns to measure their social utility. Nevertheless, this cult, itself, usually implies an effort of abstraction. The benefits of science or of virtue make for them a loyal following which our imagination has difficulty in disregarding. On the contrary, our spirit is more easily absorbed by a picture, a statue, a drama, a symphony. Invaded by esthetic emotion, it refuses to ask itself of what use beauty is or what beauty proves. Beauty is the type of value which is sufficient unto itself. Baldwin proposes to call it "autotelic." We will not go so far as to

say that all purposiveness is alien to it. On the contrary, the two notions are closely related. There is no product of art wherein those harmonious relations which attest the presence of a directing idea are not manifest among the combined elements. But the end pursued is, here, not exterior to the object itself; and this is why Kant could propose this paradoxical definition for beauty, "A purposiveness without purpose." The maximum of disinterested interest is the peculiar quality of the esthetic attitude.

But, is not this attitude, itself, a product of differentiation? Has not a long evolution been necessary to make it possible? This question could not be answered without recalling the place held and the rôle played by art in primitive societies.

It is useless to insist further on the error we would commit if we were to represent to ourselves man, in the first phase of social life, as a being predominantly utilitarian, making use of his budding reason only that he might better combine his efforts with a view to wholly material ends. Intense feelings, overexcited by an imagination which is itself stimulated as well as disciplined by the collective life, such are the forces with which it is necessary to reckon, such the forces which put their mark on all the products of primitive thought. Are these marks

already, and in what sense, signs of beauty? This is the question we must try to answer.

In one sense art is everywhere in primitive societies. We find it mixed with everything; with the sexual as well as the military life, with the economic as well as the religious.

It is on the side of the sexual life that the origins of art have most often been sought since the ascendence of evolutionist philosophy. For it seems to be on this side, also, that the human world is best seen continuing the animal world. Has not Darwin shown that sexual selection shoves into the foreground all sorts of values which the brutal forms of the struggle for existence would have given no grounds for anticipating? Where the males must win the preference of the females, superiority is to those who make themselves admired. And thus, from the desire to awaken love, beauty is born. This is the reason for the richness of the liveries of certain fish in the spawning season, the brilliancy of the plumage of birds, the songs or even dances to which certain of these abandon themselves, displaying all the graces capable of charming. Many have thought it unlikely that love should not have been, in the first human societies, also, creator of beauty. And, as a matter of fact, the ornaments which are the first forms of art—feathers on the head, rings in the nose or ears, bracelets on the

wrists or ankles, tatooings on the whole body—do result in drawing the sympathetic attention of members of the other sex to their wearer.

When, as Humboldt has already observed, the qualities peculiar to a tribe are especially marked and, as it were, exaggerated in the accouterments of a man and the deformations he imposes on himself, that man, doubtless, appears the worthiest to perpetuate the race. A typical beauty, aided by decorative art, creates a sort of privilege in sexual matters.

Nevertheless, it would be a grave error to believe that art can be developed only from love. In fact, there is not the least proof that erotic art holds the place in primitive societies that was to be expected, taking the Darwinian theory as the point of departure. It has, on the contrary, been possible to go so far as to maintain that "the most primitive arts are always the least erotic." It is in very civilized and refined societies that the majority of the forms of art are seen to gravitate around the sexual life. In the first phases, other preoccupations are foremost: the obsession of love makes itself much less felt in esthetic manifestations. One of the reasons for this is, perhaps, that even in the most primitive societies the sexual life appears to be strictly regulated. A man is not permitted to marry according to his fancy. In the matter of marriage,

traditions and class suitability weigh more than personal preferences. There is, then, nothing surprising in the fact that man arrives only relatively late at the idea of calling the seductions of art to his aid to make himself preferred.

In any case, outside the sexual life there is no lack of considerations which give man suggestions for ornamentation. In war, the intimidation of the adversary is the beginning of victory. Now, the plumes which increases the height of the warrior, the mask with which he covers his face, the scars which striate his breast, the trophies he bears before him are excellent means of intimidation. Go over in detail the war array of the Dyaks or Maoris; you will see how much study was stimulated by the desire to terrify the enemy and how many "motives" this desire was able to suggest. Let us but add that war implies, above all, not only the courage of the individual but the discipline and exaltation of the group. From this arises the preparatory rôle of the dances which, mimicing warlike action, bend the individuals to the movements of the group, at the same time allaying their inquietudes: from this arises, also, the arousing virtue of songs which recall, in verses wherein beats the rhythm of the charge, the villainies of the enemy or the glories of the ancestors.

It would be well to recollect, besides, that it is not

only on the field of battle that the tribe has need of exaltation and discipline; there are a hundred other occasions for it. In the first place it is needed in the peaceful labors of primitive industry. Whether it is a matter of cutting down a tree, of raising a heavy stone, of paddling a pirogue, all collective action calls for a prescribed rhythm. It is necessary that all should push and pull together, and that together they should inhale and exhale. Imagine a chant which by its rhythm scans, in some sort, the respiration of the united workers, arresting or accelerating their efforts; imagine that to this rhythmic chant words are added which encourage the worker, extolling the object of his toil or promising him the worth of it. Then a form of art is born whose origins are neither sexual nor war-like but economic. Karl Bücher goes so far as to believe that in analyzing the principal movements of labor—beating, stamping, rubbing—we would find the explanation of the principal meters of ancient versification; as we would see come into being, in the themes of the songs of labor, the elements of lyric, epic, and even dramatic poetry.

Aside from this source, even, it is clear that many others must have opened up, and that religion and magic, in particular, yield nothing on this score to work or to war. The idea men build up, in primitive societies, of invisible powers which dominate nature

—idea which is omnipresent and of all ideas the most imperious and the most absorbing—could not fail to exercise its influence on the first forms of art. The magician chants his cabalistic formulas; he embroiders on the themes which command the elements and spirits; and music comes into being. He strives to reproduce, in a statuette which he is going to pierce to the heart, the image of the enemy whose death he has sworn: behold him sculptor. The fine portraits of animals which have for centuries remained buried in the obscurity of the caverns of Altamira or Mas d'Azil can be explained by the wish to put a charm on the species desired in the chase. Have they not just found in one of these caverns, above a herd of buffaloes, the image of a sorcerer, covered with the skins of beasts, who presides at the propitiatory operation?

The influence of beliefs of this sort are to be recognized, after centuries, in architecture itself. It has been possible to show that, even to-day, the art of Chinese temples is obedient, in minute detail, to religious prescriptions. Carefully set toward the East, the temple bears on its walls maxims whose color is determined by the place they occupy. The idols are obligatorily grouped by triads and guarded by four or eight subordinates. The apparent fantasy of the architects hides a whole series of ritual observances.

Let us call to mind, moreover, the ceremonies organized by religion, the order and course of processions, the phases of sacrifices, the death and rebirth of gods, told or mimed in the midst of exalting songs and dances; here we come upon all sorts of models offered to art and all sorts of awakened emotions by which it is going to profit. Without the prestige of rites, is it possible to understand the birth of drama? Nietzsche conceived a tragic representation as a group of workers performing a sacramental task. He saw religion create the tragic form, determine the choice of themes and characters. It would be well to add, with Durkheim, that the emotions aroused by the cult are themselves of a nature to stimulate the imagination creative of forms. A religious festival is as it were an oasis. It rests at the same time as it exalts: literally it recreates and liberates. The very forces it brings into being from the communion of the faithful are, by definition, orientated toward an ideal world. This is why religion is the designated nurse of poetry.

If all these observations are accurate, there would seem to be a close relationship between the primitive forms of the social life and the forms of art. The latter would be seen to develop from the former.

At any rate, let us look more closely into the matter. Is it really art, itself, we have seen arise?

Are the feelings awakened by love or war, by work or religion, of themselves, esthetic feelings? Do we immediately find, therein, that disinterested interest and that search for a purposiveness without purpose which has appeared to us to be characteristic of the esthetic attitude? No one can achieve this attitude if he is not freed, to some extent, from the attractions or the pressures of life. Is a soul, filled with passion, whether erotic or warlike, capable of admiring for themselves the ornamentations intended to attract or to terrify? The workers, straining all their muscles to raise a crushing burden, taste but ill the charm of the song which gives rhythm to their efforts. Mystic emotions, also, are engrossing: the gods are easily made jealous. Can he who serves them serve beauty with the same heart? Comte remarked judiciously that we admire the work of art in polytheism all the more because we have ceased to understand the faith which animated it.

Such reflections would lead us to the conclusion that sociology, when it makes inquiries into the origins of art, usually halts at the threshold of the question. It shows us, as we have said, that in the first phases of social life, art is everywhere. It could as well be said that it is nowhere. To taste the real charm of a construction of images or a construction of sounds, a certain detachment is necessary: esthetic values exist only for minds already

freed in some fashion; freed not only from the tyranny of needs or passions, but from that of absorbing beliefs as well. The production of the work of art and also that sort of interior reproduction which admiration is, implies a surplus of spiritual energy not yet canalized. To accept the discipline proper to beauty, it is necessary that we should not be all absorbed by other disciplines. This is what is meant by the statement so often repeated that there is no art except where there is leisure and luxury.

A certain social state, a certain degree of civilization would seem to be the preliminary condition for the blossoming of art. And there would have to be precisely that evolution of values wherein we would be able to recognize the two processes of which we have already, in another chapter, demonstrated the efficacity: means transforming themselves into ends, and ends distinguishing themselves, the ones from the others.

A ritual gesture, a theme of invocation, an expiatory monument are, to tell the truth, for the preoccupied believer, only means for acting on formidable powers; but he who admires, in themselves, the gesture, the theme, the monument, he who repeats the one or reproduces the other for their intrinsic beauty, for the "motives," plastic or musical, they

furnish him, this man no longer thinks only of powers to appease. He has freed himself from that hypnotism. The discoveries suggested by primitive beliefs are, in his hands, only so much material which he kneads to his liking or, speaking more exactly, according to new laws, in such a way as to draw from them, by free combinations, effects which are, in his eyes, ends in themselves.

It would be necessary to say as much, other things being equal, of the forms and rhythms suggested by economic life. We have been shown that it is labor which furnishes poetry with its first types of measure: treading, pressing, hammering, these are the gestures which scan, each in its fashion, primitive versification. To render these gestures easier or better coördinated popular songs are composed. However, the song is something more than the motive or the work-rhythm which brings it to birth. With the same work as occasion, twenty different songs may be composed. Certain ones are retained, having been found to possess a particular value not to be expressed in economic terms. They charm of themselves. Let the attention be directed to this quality, let it take a special worth, let it become an end; then, but then alone, art comes into being.

Thus there is constituted, as it were, a world of things whose existence is justified, no longer because they are useful from any point of view whatever,

but because they are beautiful. Thus arise values of a new sort which, in their turn, demand respect. They, also, make for themselves a place in institutions. They, also, find their faithful followers and their servants, not to say their priests. These latter set them up in opposition to the other series of values, of the religious as well as the economic order. Art, through the differentiation of values, at last wins its autonomy.

That this liberation could only be the end of a long progress and presupposes a whole work of civilization goes without saying; and this alone would suffice to remind us that esthetic values also are social values. This does not give us the right to deny that they, in their turn, imply certain instincts, capacities, aptitudes, at least virtual, which seem to be the gift of nature, and without which it would be difficult to conceive how society could awaken beauty. The genesis of science, of industry, of morality, itself, has seemed to us to imply, under one form or another, aptitudes of this sort. There is one which seems quite naturally related to art, the aptitude for play. Games translate, in their manner, a surplus of vitality which wishes to spend itself freely; they respond to a need of exercise for the sake of the exercise, without regard to a result: they are the first type of disinterested activity. And it has cer-

tainly been possible to show that they render all sorts of services. They awaken the attention of the child, stimulate his efforts, develop his muscles. They impose on him varied adaptations which prepare him for those which real life will demand of him to-morrow. Without counting the fact that play, when it is collective, is an incomparable school wherein is learned spontaneously the coördinations of movements indispensable to all societies. But those who play are not thinking of these results.

By definition, the results, whatever they may be, of the action to which they give themselves are, here, that which matters least. They carry on this action for itself and to succeed has, here, no other meaning than to amuse oneself while following correctly the rules of the game. It is readily conceived why so many, in constructing theories of art, have sought its rough draught in these first and so natural forms of disinterested activity.

Every one feels, however, that art is more than play.

For art to appear, certain relations between the mind and things, which play does not imply, are necessary, as are also—through the intermediation of things, themselves—certain relations between the mind and society. A work is necessary, a wrought material which, by the very fact that it has been

worked upon by a mind, becomes expressive and capable of propagating the feeling with which it has been animated.

Action on things and action on societies, these two features must be combined for the originality of esthetic values to be understood.

The game can stop without leaving any trace. But the fancy, as Wundt says, becomes art only if, to spontaneity, is added "productivity." It is necessary that the human imagination should put its mark on a material. This material may, however, be imponderable. It is not only stone or brass, lines and colors, that art manipulates; it is also the word, the sound; even more, it is men themselves whose movements are ordered, whose replies are combined for them by the poet on the theatrical stage. In any event, whether permanent like a statue, or only capable of being reproduced like a tragedy, a form is created, elements are ordered according to a directing idea; and it is as though a new life were organized.

But even for this life, society is the indispensable atmosphere. If the creator of forms imprints his mark on a material, it is always to express himself, to give a body to his state of soul: thus, this latter can be shared, it becomes a common possession, a collective value. The need of communication or, to put it more exactly, the need of communion is the root of

all the arts. And doubtless, even here, it comes to pass that, in the effort of creation, the artist forgets that his work is a social means: absorbed by his struggle with the material, he wishes above all that his idea should take form and live before him, even though it should not find admirers.

But this sort of haughty isolation is no more than a moment, soon passed, of artistic creation. The artist may execrate the crowd: if he does so it is because he wishes to master it. Unrecognized, he counts on an élite which will be found to avenge, in adopting him. *Mihi canto et Musis* cries the poet to himself at times. But, as has been justly remarked, the Muses are, themselves, a society before which appeal is made. "One is freed from the tyranny of his public," observes Lanson, "only by the representation of another public."

It is especially when we think of the formal aspect of art—of the struggle the artist carries on to combine, into harmonious wholes, lines, masses, colors or sounds—that we are carried so far as to disregard society. And yet, in spite of appearances, the creator is never alone. He is not left to himself in his hand-to-hand struggle with his material. Traditional conventions have always a considerable part in esthetic techniques. No one has marked this fact better than Baudelaire when he says, "The profession of the poet consists in expressing the lyrical

movements of the soul in a rhythm ruled by tradition." That this tradition is itself subject to corrections, goes without saying. It often happens that the artist finds himself restricted by the old forms. In a more general fashion, it happens, at certain moments in the social evolution, that novelty as such becomes, in its turn, a value in itself. Then the innovators are to be seen fashioning new bottles for their new wine and seeking to modify the conventions which preside over poetic, dramatic or plastic art. These struggles, however, do not have for object the suppression of all rules; but rather to force the acceptance of new rules. Groups must be formed to defend these various forms of free art which have the tendency to become, in their turn, dominating forms. And the battles they have to wage show well enough that the inventive artist must reckon not only with the resistances of his material, but with the resistance of society which persists in giving a sort of objective value to esthetic conventions themselves.

Furthermore, the creation of forms, plastic or poetic, architectural or dramatic, beautiful to the eyes or the ears, or the two senses at once, is only one aspect of art. It is also essential, normally, that the forms should be expressive and interest thought as well as sensibility; or at least the feelings as well as the senses. Again, it is necessary that

the combinations of impressions should be obedient to an idea capable of arousing the emotions; whether this can be expressed in words or is ineffable matters little. In this way, as is natural, art bathes in the social atmosphere. This furnishes it with all sorts of feelings to express. Religious enthusiasms, vanities of families, of tribes, of nations, disdain of races for each other, class animosities, desires for domination or yearnings for independence, all the qualities of loves or hates which draw men together or set them against each other, offer so many themes to the imagination of the artists, interpreters of the groups. And a moment comes, in certain civilizations at least, when that which interests the individual passes to the foreground of collective consciousness. Art, also, profits by this conversion of values. Lyric poetry sings personal feelings. But always, since he sings, the poet seeks sympathy. He invites others to find in themselves that which he finds in himself. "Fool to believe that thou art not I," cries Hugo. In the most personal confession, the artist is still, for humanity, an interpreter and an intermediary; he increases the number of communicable feelings; he enriches the treasury of works which makes souls vibrate in unison.

This vibration is, to speak truly, of a particular nature. By the very fact that art expresses feelings, whatever they may be, in esthetic forms, it trans-

figures, in some sort, these feelings themselves. As Aristotle said, it "purifies" them. It is not content with exciting love or hate by no matter what means. By definition, all means are not acceptable to it. It must compose harmonious wholes and put forth works which have worth through their intrinsic beauty. Incorporated in these works, feelings lose their crude reality. He who shares in them, grace to these intermediaries, is somehow calmed at the same time that he is moved. He has the impression of being carried into a higher world, at once real and unreal, wherein live, as though they were natural, beings who are, however, only products of the human imagination. In short, he participates—as so many theorists of art have expressed it, each after his fashion—in the work of a sort of creative liberty. From this comes a solace and a sort of inner serenity which is the proper fruit of esthetic values.

We must not, then, be content with saying that the work of art socializes or "unanimizes." It is not limited to carrying an idea from one soul to the other and making them vibrate together. If it is truly a work of art, the communion it establishes is at the same time an elevation. It calms at the same time as it exalts. It liberates at the same time as it unites.

It is certainly a great rôle, this rôle which is played by masterpieces merely in assimilating souls through

the feelings they incorporate. It is well known what Italian unity owes to Dante, or Anglo-Saxon civilization to Shakespeare. The common sets of ideas, of images, of symbols, that letters and arts compose make incomparable cements, more solid at times than those of constraint or interest. But assimilating masterpieces, if they continue to be appreciated for their esthetic character, produce effects of union of a special nature. By virtue of their form, they detach souls from reality, they orientate them toward the ideal, they open up to them a world of superior values.

If these observations are correct, we can understand why so many minds have sought, in the esthetic life, something like an introduction to the moral life. On this ground, also, conjunctions of values can be brought about. Art, its autonomy once conquered, finds itself able to second morality in more than fashion.

We have said that it cannot flourish except where there is a preliminary disinterestedness of the individual. The "symbolic sympathy" wherein we are shown the essence of the esthetic impression presupposes that we detach ourselves from ourselves, project ourselves into things, to tremble with the leaves, fly with the birds, be radiant with the sun. The artist is objective in his fashion—though, doubt-

less, this fashion is very different from that of the scholar—since, in art, it is less a question of discovering than of inventing, less of reproducing reality as it is, than of drawing from it harmonious relations. At least the truth of beauty, if there is still truth, is of a very special nature: it is not to be seized either by geometrical demonstration or by experimental verification. This does not mean that it exacts neither effort nor discipline. The life of great creators demands as many sacrifices as that of great discoverers. A Beethoven or a Michelangelo give lessons of disinterestedness and even of moral heroism as well as a Pasteur or a Renan. And whoever heartily desires to penetrate deeply into their work cannot but participate, in some measure, in their effort: he feels the cost of the virtues without which the masterpiece could not have taken form. In this sense, it can be said that esthetic sympathy is normally moralizing.

It is not surprising that people should frequently have sought, in esthetic values, something of an antidote against the demoralizing effects which the exclusive domination of certain other values, the economic for example, tends to produce. Wilson, when university president, pleaded persistently for the classic humanities. He saw in this disinterested culture, precisely because disinterested, the best of dikes against the spirit of realistic utilitarianism

which, seconded by the development of business, threatens to submerge everything. And in France, after the war, when, contrary to the universal hope, this same spirit has been seen to gain ground, many have thought that art might be a remedy. J. de Gaultier says that it is necessary, in order to "moderate the violence of the possessive instinct," to count on the victories of an esthetic activity, attaching superior joys to the representation of things, joys which can but be increased in being shared. "Produce, produce at any cost" is a fine slogan. However, a too knowing industrialism should not be allowed to make the higher utility of idealism forgotten. The various groups which have been constituted to remind us of this truth—Defenders of French Thought, Friends of Intelligence, Members of the Confederation of Intellectual Workers, etc.,—have not failed to make a place for the artists. They have wished to defend, as a particularly fruitful form of "thought," that which, in creating beauty, teaches minds to go beyond the point of view of useful realities.

It is worthy of note that, in anticipating this benefit, no one makes the demand that art be subordinated to morality. It never serves this latter better than when acting indirectly, remaining itself and defending for beauty the character of end in itself. We could express this by saying that the

conjunction of values is so much the more fruitful, here, in that their differentiation is more carefully maintained. The reason for this will easily be grasped if we remember that art does not obtain the effects of serenity and liberation we attribute to it through the ideas it expresses but through the form it gives to that expression. Appreciation of this beauty for itself is the condition of the kind of morality art favors.

We can sum this up by saying that it is worth while, for the aid of the moral conscience, itself, to develop what may be called the esthetic conscience, or, as was formerly said, to cultivate taste. It is not, then, without due grounds that, in teaching, a share is reserved for the non-scientific disciplines, for arts and letters. And it is well for them to be taught with the idea of habituating children to appreciate the specific character of artistic or literary masterpieces. In truth the history of art, and still more that of letters, lends to culture certain scientific qualities such as exactness, taste for precision, regard for proof, all forms of intellectual probity whose worth it is well to bring to mind on every occasion. But a "literary" teaching which should limit itself to cultivating these qualities would remain external to its essential object which is to teach to admire. Educating the esthetic sensibility is, perhaps, the best means of filling in the gaps or of counterbalancing

the excesses of a purely scientific culture. It is, in any event, especially useful in reacting against the régime of exclusively practical apprenticeship which the exigencies of economic life tend to impose.

A nation which should lose reverence for these ideal values, the esthetic values, would lose, also, one of its best protections against various germs of corruption: as though, in its food, salt should be lacking.

CHAPTER XIV

THE NATION AND MORAL TEACHING

Now that we have seen, through examples, how values are differentiated and linked together, we are perhaps in a better position to understand the relations between the group life and the moral life.

The results of sociological researches are sometimes summed up thus: "The group interest always comes first. It is this which commands individuals to act contrary to their desires, to master and sacrifice themselves. It is the measure, the beginning and the end of all morality."

This is a general formula, not to be accepted without reservations. It would at least be necessary to define exactly what is to be understood by group interest. We can grant that the majority of the virtues imposed on individuals by the collective consciousness—capacity for self-control, spirit of discipline, zeal for work or courage in war —seem to have for end the continuance of the group and the maintenance of the cohesion indispensable to its expansion. And when the life of the group, whether a primitive tribe or a modern nation, is

menaced, it is only too clear that, as against the life of society, the life of individuals counts for little. The recent war was a terrible demonstration of this.

However, this surely does not mean that the group can command anything, no matter what, in order somehow to survive. It is not mere life, in itself, that human societies wish to safeguard. And when people insist that, by the precepts of morality itself, societies defend their interests above all things, this idea need not be taken in the material sense to which the economic utilitarianism of our day has accustomed us. The group interest is specified in function of certain values which impose themselves aided by collective beliefs.

This is particularly visible in primitive societies through the very fact that, as we have seen, religion dominates everything therein. Certainly, under its august mantle, instincts are to be seen stirring, curiosities awakening, activities being ordered, which are not created by it and which, through their growth, will reduce its empire. But, in spite of all, it keeps the high hand for centuries; and its action, as generator of scruples, has for its first result to make societies realize that all means are not equally good for them. Moreover, their principal interest should not be of the material order. Is not the supreme end the accomplishment of the will of the gods? It is the life of the gods that must be

sustained, first and foremost, by keeping up a cult. Seat of superior values, the altar is the organizing center of a complex spiritual life which appears as the condition of social life.

But what will become of this world of values when religion ceases to be the framework of society? Now is not this exactly the case with the modern nation? The modern nation is, by definition, liberal. It leaves religious beliefs free and no longer makes adherence to a certain one of them the condition of nationality. It seeks the principle of civil laws outside confessional laws. It laicizes institutions.

This does not mean that it is going to materialize all values and no longer search other criteria of well-being than the economic. A society can endure only if, under one form or another, it creates something of the ideal necessary to stimulate and coördinate individual efforts. That the collective ideal was in the beginning invested with the religious form does not in the least signify that it must vanish once this veil has fallen. The forces which brought it to birth and which are themselves produced by the interactions of consciousnesses continue to operate. The modern nation, also, presents herself to the love of her sons as guardian of a world of values.

In this world, economic values certainly occupy a place, and one of increasing importance. If it is not true that the nation is, as some have said,

only an economic system designed to make a population live on a certain soil, it is still true that cultivating the native soil is considered a duty. The incorporation of the work of generations, producer of riches, in the land of the ancestors, is assuredly one of the elements of patriotism. The fact that it is a question, here, of collective interests magnifies the daily labor and raises it to the rank of the highest virtues. But the horizon of values is greater. The nation does not limit its ambition to making a growing population live materially on a well managed territory. The sort of life is as important to it as the life itself, the use of wealth and strength not less than the strength and wealth. It seeks its unity not only on the material but on the spiritual side. The language, the literature, the arts, a certain way of conceiving the world—that is to say a certain way of hierarchizing values—become the characteristic marks of the nation. It becomes its pride to safeguard them. It aims, by the manner in which it organizes its life, to make live certain ideas which become for it directive forces. In the war which has just left Europe mangled and torn, economic interests were, without question, engaged. But it was not iron or coal which took the foreground of collective consciousnesses. Each nation, to incite its children to the supreme sacrifice, reminded them, before everything else, of its culture

to be saved, and the ideas of which it claims to be the guardian.

Its culture only? Almost always, it went further. Each nation endeavored to demonstrate to its children that they were setting out to defend civilization, itself. Here is a point which is worth dwelling on. We are able to note, through this example, that the systems of values of which nations are the guardians have a tendency to overflow their frontiers. Vainly is it repeated to us that a rigid isolation is a condition of national culture and that its watchword should be, "Remain thyself." Interpenetrations are the rule because the expansion of values is one of the tendencies of history. Have we not been led to observe that, as far back as primitive phases, the area of civilizations goes beyond the precincts of tribes? Usages and customs, legends and rites become common property for several groups. With even greater reason is it true that, when groups, which are complex and united among themselves by a hundred forms of commerce as are the modern nations, are in question, to think only of oneself, to think only for oneself is, henceforth, a paradoxical ideal, so anachronistic is it. The possibility of universalizing becomes one of the criteria of value. But this ambition, itself, does not pass without producing a certain number of internal transformations in the world of values. If you desire the

conception of the world implied by your judgments of value to have some chance of attracting the souls of widely differing nations, is it not necessary that it should be truly human in its tendencies, built on the spirit of fraternity and no longer on pride, contempt, intolerance, that, in short, it should promise to all respect for law and the organization of justice? Thus could be explained, through regard for universalization, itself, the rational character with which systems of values tend to invest themselves, and the effort of cultures to expand in civilization.

It is natural, however, that this tendency to universalize should be accompanied by a tendency to individualize, and that the human being should become, in his turn, the object of a cult. When people seek to formulate an ideal which will be attractive to all, they set aside the lump differences,—differences of nations, of races or of classes—which separate men: they retain only the quality which is common to them, which is to constitute a distinct personality. To furnish each of these the means of free development becomes an imperative social ideal.

Furthermore, does not the very complication of civilization inspire the idea that this solution through liberty is the most opportune? We have seen that differentiation of values is accompanied, normally, by the multiplication of partial groupings, and that,

placed at the point of intersection of a certain number of groupings, the individual feels himself, thereby, inclined and prepared for autonomy. He is no longer shut in by life with all his tendencies canalized, as it were, in advance. He can seek out his path, create for himself his own proper synthesis, retouch, in his fashion, the table of values. And it is easily seen that, for the maintenance of the majority of these, this free development of individuals constitutes a precious guarantee.

In order to make discoveries, must not the scholar be able to think for himself? What better artist is there than the sincere artist who expresses his own personal experiences with things? What would become of industry without the spirit of initiative and invention? All these roads lead to the same center. Thus it comes to pass that personal autonomy is set up as a higher value. And we see nations presenting, as their clearest title to their sons' love, the services they have rendered the cause of personal liberty, the efforts they have expended to organize society as though, by rational contracts, its members had really worked out the conditions of their collaboration.

This is proof that the hour is come when the group, orderer of the moral life, no longer presents its proper life as such, its duration under any form whatever, as the supreme end. It takes great pride

in the human values it serves and of which it is no longer anything but the means.

Many will think these tactics peculiarly dangerous. For the nation which justifies, in this way, the devotion it claims from its children gives them, at the same time, the right to judge it and to measure their devotion by the fidelity it has shown toward the ideal it has set itself. To put the nation back in the rank of means is to assimilate it to those partial groupings, one-sided and conventional, in which people participate only with a part of their personality, and which they quit as soon as it no longer seems to respond to the object for whose sake they gave it their adhesion. It is to bring about "conditional" patriotism, full of secessions, breaker of national continuity as well as solidarity.

The danger will appear less grave, perhaps, if we consider, after the dissociations, the possible conjunctions of values, and particularly if we remember what we have said of "polytelism," a same means being able to serve several ends.

Now, when partial societies are in question, polytelism finds its place and plays its rôle of preserving and reconciling. Men constitute, as we have said, ever more numerous societies with a view to definite ends; commercial associations, for example, or groups devoted to sports, leagues for popular edu-

cation or for public hygiene. But these common ends do not necessarily imply the total identity of the motives which inspire the members. By some of them this common end may be considered as a means, and as a means to ends which are, in other respects, different. An extended period of leisure at week-ends may be desired in order that the worker may have better health, in order that he may cultivate his soul, in order that he may enjoy family life, in order that he may participate in civic life. Among those who collaborate in campaigns in favor of the "English week," some will prefer a certain one of these ends, the rest will prefer others. In practice, this does not keep them from collaborating. And this proves that collaboration does not in the least exclude differences, even differences of ideals.

It is agreed, doubtless, that these differences should not go so far as contradiction: otherwise the bond would break, collaboration would become impossible, secessions would be produced.

But, between the perfect unanimity which renders secessions inconceivable and the excessive diversity which makes collaborations impossible, stretches a whole series of states wherein a relative cohesion continues to exist and the multiplicity of possible effects is, by common accord, discounted. In this long intermediary zone, polytelism accomplishes its

office. It permits of groupings being less numerous than ideas, since it permits individuals, inspired by divergent ideas, to unite their efforts. "To each his dream." And yet the men led by these personal dreams form a caravan: they march with the same step, in the same direction. Above so many principles of differentiation, they remain united.

Could we not, through observations of the same order, explain how, in spite of the differences the tables of values adopted by its members may display, the unity of a nation persists?

That which is true, as though by accident, of partial societies, is true with greater reason and as though through the very nature of things, of a society, "total," complex and encompassing, such as the nation. It also, it especially, is capable of serving diversified values. And if it is dangerous to identify the native land to any extent with a special ideal—that of a party, or a church, or a class—it is not idle to point out that the native land remains, in any case, the common means for numerous ends, even quite divergent ends.

The complex organization of the nation offers irreplaceable resources to all the dreams which desire realization. Whether your supreme ideal be the utilizing of the riches of the globe, the safeguarding of a certain intellectual culture, the progress toward social equality, you will always have to

support yourself on the historical system to which the nation serves as framework. You are at liberty, doubtless, to try to bend this system in one direction or another, to impress such and such an orientation on its central activities. Its permanence and its power are still, for your various efforts, the preliminary condition of success. And thus, it is not only in turning toward the past, but in looking toward the future that we justify patriotism. To call our native land the "Faithful guardian of our common memories" is not enough. It is, still more, the indispensable worker for our various hopes. The multiplicity of perspectives glimpsed behind it creates for it an aureole.

Has not the experience of the war amply confirmed this thesis? Have not men of all "spiritual families," without abandoning anything of their different beliefs, shown themselves ardent in defending the independence of the great common family? "Unity of action, diversity of explanations," as F. Buisson remarks. But this diversity in unity is possible only if the nation is *par excellence* the means capable of serving to various ends. Polytelism comes, here, to the aid of patriotism.

Reflections of the same order will perhaps throw light on the debate, opened so long ago, on the laic teaching of morality in the public schools.

Ordinarily, the character of this laic teaching is explained and justified in pointing out the antithesis between theoretical and practical morality; the latter uniting as much as the former divides. Let the educator limit himself, then, to teaching the common virtues without regard for theories and play the rôle of conserver and peacemaker.

Our studies on the conjunction of values and polytelism may, perhaps, enable us to add something to this classic demonstration.

The fact it alleges is undeniable. People who are divided by their theories find themselves in agreement on the practical side. Believers and unbelievers, Catholics, Protestants, free-thinkers, all blame with equal energy the judge who lets himself be corrupted, the representative who traffics in his authority, the officer who abuses his power. They are equally zealous in inculcating their children with disgust for customs which countenance such villainies. That is to say that, separated by their metaphysics, in practical affairs they defend the same system of values. Long kept in the background, these convergences have, in our times, been brought into full light. There is no longer any one who contests them or who does not have a presentiment of how fruitful they may be in consequences.

But, still, in what sense should we interpret these same convergences? What is their exact significa-

tion? They can be presented in more than one manner.

It will be said, for example, "If these men, who are necessarily divided by their theories, find the means of coming to an understanding, it is proof that their theories are very far from reigning over their whole souls. Outside the principles to which they give allegiance, in a very large zone where these principles hardly make their influence felt, a certain number of practical ends is imposed on them. Together they desire the prosperity of the country, the health of the race, the amelioration of customs. These values which they esteem in common, and which the very community of this esteem enhances, pass to the foreground of their consciousnesses when they come together and eclipse the rest. Principles drop into the background. They are, for the time, forgotten. People set them aside to take up more urgent matters, to collaborate with defenders of the public welfare who come from all points of the moral horizon."

In sum, what the alleged fact would seem to prove is how little weight theories really have and how far they are—contrary to appearances, or at least to the idea the classic tradition gives of them—from governing moral life. Direction as well as impulsion comes to it from other quarters.

We are able to grant that there is much truth in

this thesis. None the less, another fact subsists, which is that many men continue to feel the need of justifying their conduct by coördinating their ideas around some principle. Reflection, when it makes virtues its object, demands of them their titles, and, in justifying them, puts them in the rank of means. It is the function of theories to fix those superior ends to which practical ends, themselves, will become subordinate. You may consider this true only in appearance, but it is at least a normal appearance and one which plays its rôle in the organization of the inner life.

But if this method takes the lead, if the regard for higher ends—social utility or individual perfectioning, respect for divine intentions or fulfillment of natural desires—again takes the whip hand over consciences, are not these latter going to find themselves once more irremediably divided? At least, could individuals form groups for moral action except with those who had complete agreement with their conception of life?

Here, again, polytelism brings forward its palliative. A same means serves several ends. A same moral value can, then, be found to be justified from different points of view. Probity, loyalty, fidelity to the pledged word, respect for human life and dignity, these are so many virtues which keep their worth in the sight of God as in the respect of this

world. The free-thinker extols them as much as the believer. The morality of individual perfectioning finds them to its advantage as well as that of social interest. All things considered, then, there should be no need to say to those who form a coalition for the defense of the same value, "Renounce or at least set aside your ultimate preferences." Another attitude is possible, and one which demands a smaller intellectual and emotional sacrifice. "Whatever your preferences may be, there are many virtues which can give satisfaction to them all. You can improve together this common capital without any one of you forgetting his ultimate ideal."

We said many virtues: certainly not all virtues. It would be absurd to maintain that the same practical program can be deduced down to its very details from divergent principles. The exaggeration would be manifest and would call forth too easy objections. It is probable, for example, that in a morality depending upon the Beyond, values based on asceticism will find their justification more easily than elsewhere. A "free philosophy" will reserve a special sympathy toward the attitudes implied by the autonomy of personality. Each of these systems has its favorite virtues, those which are nearest to its intellectual heart, to its central principle. They would not, then, set up a single table of values. It is none the less true that, on the tables they set up,

many of the articles are to be met with again and again. This is enough to enable the adherents of these systems to remain collaborators. Polytelism, in this field, also, counteracts the centrifugal forces and keeps diversities associated.

Can it not be said that, in this sense, it favors the action of the laic educator?

The laicization of morality is not only, as is most often pointed out, a particular case of the differentiation of values. We have, more than once, had occasion to remind ourselves of this. Closely as religious ideals and moral practices seem to be interwoven originally, dissociations are at work whose movement is accelerated with the complication of civilization. The good they do men rather than the pleasure they give the gods becomes the aim of virtues. Thus an ever increasing number of human values conquer their autonomy. It is natural that, in a country where religion is no longer the principle of unity, people should decide that these are the values to be emphasized in public school teaching.

But, along with this movement of differentiation, moral teaching in the public schools can lay claim to utilizing the movement in the opposite direction which we have described, that which pushes on to the conjunction of ends. We have shown that many virtues concentrate on themselves the support of minds which are otherwise attached to very different

principles. The public school will give these minds all the satisfaction they can legitimately claim if it cultivates the field where they come together at the intersection of their systems.

Two tendencies, then, which come from afar, the tendency toward differentiation and the tendency toward conjunction of values—tendencies which are opposite only in appearance and, in reality, complementary—contribute to explain the orientation which we are trying, at the present time, to impress, in our schools, on the moral life of the nation.

Our schoolhouse is found to be placed at the confluence of two streams whose course we have indicated in a bird's-eye view.

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INDEX

Accommodation of remainders in history, 82 f
d'Alviella, G., 119
Ampère, 207
Andler, 65
Animal, can he project values, 20; societies, 139 f.
Aristotle, 180, 193, 220, 244
Arkwright, 205
Arnold, M., In. xviii
Art, 225 ff; in primitive societies, 228 ff; the most primitive the least erotic, 230 f; detachment necessary for its enjoyment, 234 f; "purifies" feelings, 244; and the moral life, 245 f
Autonomy of the individual, 256

Bacon, 208
Baldwin, 227
Bardoux, In. vi.
Bastiat, 111
Baudelaire, 241
Beauty, "autotelic," 227; love as creator of, 229 f
"Bee-man," the, 31
Beethoven, 8, 246
Behaviorism, In. xx f
Beliefs, obligatory, a characteristic of all religion, 183
Belot, 138, 220, 222
Berthelot, 203, 224
Bosanquet, In. xxiii
Bossuet, 73
Bouglé, In. vi, viii, ix, xxix, xxxiv, xxxvi
Bourgeois, L., 36
Boutmy, In. vi
Brunetière, 117
Brunschwieg, 148
Bücher, K., 232
Buckle, In. xiv
Buisson, F., 141, 260

Cabaliste, the, 99
Caird, 118
Cartesian, method, 148; dualism, In. xv, xxi
Caste system, the, 64
Chateaubriand, 212
Christianity, and science, 197 ff
Cicero, 5
Civilization, distinctive product of social life, 36; distinction between civilization and society, 190 f; and nationality, 254 f
Classification, necessity of, 7; primitive, 170 f; 179
Cognition, In. xxv
Collaboration, value of, 25 f; means toward, 257 f; between philosophy and science, In. vii f
Collective, the, an intermediary between individual and universal, 187; feelings, necessary to values, 223
Communion, of feeling, 45 f; need of, at the root of all arts, 240 f
Compartments, system of mental, 59 f
Competition, as stimulus to desire, 23 ff
Complication, social, 66 f; 255
Composite, the, 99
Comte, A., 8, 44, 52, 80, 104, 162, 165, 168, 189, 190, 203, 213, 235, In. v
Concepts, by which science progresses, 167 f
Conjunction, of values, 87, 110, 220, 261 f; of ends, 265 f
Consciousness, the collective, 28 ff; religious beliefs and the collective, 135 ff; results of fusion of consciousnesses, 167

f; social self-consciousness, In. ix
Cooley, C. H., In. vi, xxii, xxxiii, xxxiv, xxxvi
Corneille, 4
Cournot, 56, 97, 172
Croiset, 224
Crusoe, Robinson, 23, 108
Crowd, psychological effects of, 30
Cuq, 143

Dalton, 206
Dante, 245
Darwin, 229, In. xi
Davy, 206
De Bonald, 97
De Gaultier, J., 247
Democracy, and science, 211 f; and social self-consciousness, In. ix
Democritus, 195
Denis, H., 113
Descartes, 148, 186, 207, 215
Differentiation, of values, Chap. IV, 55 ff; 265 f
Dissociation, of values, 110
Dissolution, law of, 56
Dubois-Reymond, 197, 201
Dumas, G., 12
Duprat, In. vi
Durkheim, E., 16 f; 27, 32, 34, 35, 52, 67, 107; his views concerning religion and morality discussed, 119 ff, 168, 169, 183, 191, 234, In. vi, vii, xxix, xxx

Education, Values and, Chap. III, 38 ff
Egger, 197
Ends and means values, Chap. V, 71 ff; 257
Epiphenomenalism, 74
Espinas, 139, In. vi
Euclid, 196
Everett, In. xiii n
Evolution, law of, 56; mind subject to, 180; emergent, In. xvii; differential, In. xxiv

Feelings, necessity of acting upon, 44 f; collective, 223 f; and sense of values, In. xxv
Ferry, 213
Fossey, 157
Fouillée, In. vi
Fourier, 98 f
Franklin, 20
Frazer, 100, 126, 130, 132, 156, 188

Gambetta, 213
Gide, C., 12
Goethe, In. xxii
Gomperz, 194
Guizot, 77, 189
Guyan, In. v

Hadrian, 196
Halbwachs, 102
Halévy, E., 206
Hamelin, 76
Hamp, P., 1
Hegel, 64, In. xxiii
Heterogony, 80
Hipparchus, 196
Höffding, 6, 89, 144
Homo æconomicus, 95, 98, 104, 107, 109
Homo juridicus, 95
Howitt, 130, 131
Hubert, 159, 164
Hugo, 134, 243
Humboldt, 230

Ideal, category of the, 35
Illusionism, 73
Imagination, generator of concepts, 168 f
Industry, Science and, Chap. XI; 201 ff; not passive toward science, 203 f
Initiation, 45
Instruction, compared with training and education, 43 f, 221

Janet, P., 12
Jevons, 118
Judgments, of value and reality, 10 f; subjectivity of judg-

ments of value, 12; social function of, 38 f

Kant, E., 76, 89, 228, In. xxiii, xxix
Kay, J., 205
King, I., 119
Kingship, origin of, 188
Koffka, In. xxi n

Labor, division of, 63 f, 67 f; and the beginnings of art, 232
La Fontaine, 116 n
Lalande, 56
Language, an instrument, 154; science a perfectioning of, 177; revelatory of national differences, 184 f
Lanson, G., 50, 241
Lapie, 217
Law, laic, 142 ff, 191; influence of "market" upon, 188 f
Le Châtelier, H., 207
Lecky, 201
Leroux, 63
Lévy-Bruhl, 61, 136, 140, 161, 169, In. vi
Leibniz, 144
Loisy, 134
Lotze, In. xxiii, xxix
Love, as creator of beauty, 229 f
Lubbock, 100
Lucretius, 41

Mach, 108
Magic, technique of, 154 ff; distinguished from religion, 157; and art, 232 f
Man, mental state of primitive, opposed to mental state of civilized, 57 f
Mana, the, 63, 126, 158, 164, 171
Mantoux, 205
Marillier, L., 119, 141
Marriage, strictly regulated in primitive societies, 230 f
Marx, K., 21 f, 91, 203
Masaryk, 73
Mauss, 159, 164
Meyer, E., 119
Michelangelo, 246
Michelet, 139
Milhand, G., 162, 196, 209
Mill, J. S., 19
Montaigne, 191
Moral sentiments, products of collective life, 48
Morality, Religion and, Chap. VII, 114 ff; claim for priority of, 140, Science and, Chap. XII, 211 ff; and theories, 262 f
Moulet, A., 51
Müller, M., 129
Münsterberg, In. xxiii
Mysticism, 196 f

Nation, the, and moral teaching, Chap. XIV, 250 ff; liberalism of modern, 252; and polytelism, 257 ff
Naturalism, growth of social, In. x
Nature, levels in, In. xvi
Newton, 208
Nietzsche, 7, 16, 234

Orenda, the, 171
Organization, of production, 111 f; necessity of, for science, 195 f

Papillonne, the, 99
Papin, 205, 208
Paris, G., 219
Partial societies, 66; and polytelism, 257
Participation, as characteristic of primitive mentality, 61, 136, 163, 169
Pascal, 8, 14, 133, 208
Pasteur, 186, 246
Patri, A., 5 f
Patriotism, and collective interests, 252; "conditional," 257; forward-looking, 260
Pécaut, 143
Peel, R., 64
Péguy, 116
Perdiguier, A., 203
Perry, In. xxix

Pfleiderer, 118
Pirenne, 65
Platonism, and theism, In. xxiii f
Play, type of disinterested activity, 238 f
Poetry, origins of, 232, 237
Poincaré, 219
Polytelism, 84 ff; and the nation, 257 f, 263 ff; In. xxxvi
Posidonios, 196
Positivism, "germs of," 165; dangers of, 209
Projection of values, 18 ff
Psichari, 116
Purposiveness, category of, 71 ff; beauty a "purposiveness without purpose," 228

Rabelais, 8
Ranade, 95
Rathenau, W., 112
Rauh, F., 50, 53, 107
Reason, the, and economic progress, 201 f; necessity for defense of, 209
Regnault, 207
Reinach, S., 131, 134, 156
Religion, and economic life, 100; and morality, Chap. VII, 114 ff; as guardian of values, 89, 143; the liberal of ancient Greece, 193; and art, 234 f; its dominance in primitive societies, 251 f
Rembrandt, 8
Renan, 35, 183, 224, 246
Renouvier, 193, 196, 197
Rhythm, origins of poetic, 232
Ricardo, 91
Richard, In. vi
Ritschl, In. xxiii, xxix
Robertson, 118
Rollin, 5
Rousseau, 5, 7
Roustan, 151
Rumford, 206

Sageret, J., 31, 95, 208
Saint-Simon, 5, 189
Say, J. B., 91
Scholasticism, 199 f
School, the laic, charges against, 115 f
Science, its discipline in teaching, 47 f; Value and, Chap. VIII, 147 ff; Chap. IX, 167 ff; Social Conditions of, Chap. X, 182 ff; of ancient Greece, 192 f; and Christianity, 197 ff; and Industry, Chap. XI, 201 ff; and Morality, Chap. XII, 211 ff; cult of, 224 f; prestige of inorganic, In. x
Séailles, G., 13
Sellers, R. W., In. xxi n
Shakespeare, 245
Simiand, F., 15, 93, 106
Simmel, G., 22, 27, 69, 77
Sismondi, 112
Small, A., In. xxxv
Smith, 118
Social complication, 66 f, 255
Societies, partial, 66
Society, as creator of ideals, 16, 32 ff; a living thing, 39, intermediary between man and nature, 172; has given forms to work on, 180 f; and Scientific Progress, Chap. X, 182 ff; distinction between civilization and, 190 f; art in primitive, 228 ff; the nation a partial, 257
Sociology, philosophical, In. VI f
Sorley, In. xxiii
Socrates, 199
Spencer, 21, 63, 78, In. x
Spinoza, In. xxiii
Standard of living, 102 f
Supply and demand, 92 ff

Taboos, 131 f
Taine, 6, 135
Tarde, 101, In. vi
Teaching, the Nation and Moral, Chap. XIV, 250 ff; laic, 261 f
Technique, practical, and religious beliefs, 137 f; Origins

of Positive, Chap. VIII, 147 ff; "Transcendental," 152 f; Magico-religious, 154 f; sheltered by magic, 159 f
Thales, 195
Thought, personal, limited in advance, 29; technical, in primitive societies, 153 f; rational and prelogical, 161; Origins of Rational, Chap. IX, 167 ff
Torricelli, 208
Totem, 125
Totemism, and domestication of animals, 155 f
Tradition, and novelty, 242
Training, 42 f
Tylor, 82, 128

Universality, of scientific truths, 185 f; a criterium of value, 254

Values, use and exchange, 2; spheres of, 7; relativity of, 13 f; as realities, 15 f; Chap. II, 18 ff; defined, 19; Differentiation of, Chap. IV, 55 ff; Ends, Means, Chap. V, 71 ff; "instrumental," 76; Economic and Ideal, Chap. VI, 88 ff; Religious and Moral, Chap. VII, 114 ff; and Science, Chap. VIII, 148 ff; Chap. IX, 167 ff; influence of economic values upon others, 188 f; Esthetic, Chap. XIII, 226 ff; recent emphasis upon, In. viii f; generalizing possibilities of, In. xii; history of value-theory, In. xxiii; intrinsic and extrinsic, In. xxvi

Vaucanson, 205
Vessière, P., 117 n
Voltaire, 122, 129, 188

Wagner, A., 98
Wakan, the, 126, 171
War, and the beginnings of art, 231
Ward, In. vi
Weber, L., 153, 160, 204
Westermarck, 119
Wilson, W., 246
Windelband, In. xxiii
Worms, In. vi
Wundt, 80, 118, 240
Wyatt, J., 205

Young, 206

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